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AUTHOR Gurin, Patricia; Morrison, Betty Mae
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ABSTRACT

The research reported here examines the role of psychological expectancies as labor market supply characteristics of black and white men and women. Secondary analyses are carried out on data provided by the Survey Research Center 1972 national probability sample of adults 18 years and older drawn for the presidential election study. The report focuses on race and sex differences in previous labor market experiences, the relationship of these past experiences to current employment expectancies and general feelings of efficacy, and finally the effects of both market experiences and expectancies on current behavior. Psychological expectancies are emphasized as the elements of motivation that should have unusual significance for understanding the dynamics of race and sex discrimination in the labor market. There are five major chapters. Chapter 1 describes the sample and measures used in the analyses reported here. Chapter 2 describes the market experiences, perception of obstacles, and current expectancies of black and white men and women. Chapter 3 examines the interrelationships of these variables with particular focus on the effects of years of schooling and previous market experiences on current expectancies. Chapter 4 presents a general causal model in which expectancies are viewed as intervening influences between current market outcomes and variables at two earlier stages, original educational attainment at stage one and subsequent market experience at stage two. Three types of current market outcomes are analyzed with application of the model to the job status of blacks and whites, to women's and men's search behavior, and to the work intentions of white housewives. Chapter 5, on implications for counseling and future research, describes the types of expectancy and experience measures and the design that will be needed to extend this line of interdisciplinary labor market research. (WL)

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FINAL REPORT

EDUCATION, LABOR MARKET EXPERIENCES, AND CURRENT EXPECTANCIES OF BLACK AND WHITE MEN AND WOMEN

National Institute of Education Project No. 4-0586

Patricia Gurin
Betty Mae Morrison

Survey Research Center
Institute for Social Research
University of Michigan
Ann Arbor, Michigan

U S DEPARTMENT OF HEALTH, EDUCATION & WELFARE NATIONAL INSTITUTE OF EDUCATION

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CHAPTER I

INTRODUCTION

The research reported here examines the role of psychological expectancies as labor market supply characteristics of black and white men and women. Secondary analyses are carried out on data provided by the Survey Research Center 1972 national probability sample of adults 18 years and older drawn for the presidential election study. The report focuses on race and sex differences in previous labor market experiences, the relationship of these past experiences to current employment expectancies and general feelings of efficacy, and finally the effects of both market experiences and expectancies on current behavior. Psychological expectancies are emphasized as the elements of motivation that should have unusual significance for understanding the dynamics of race and sex discrimination in the labor market.

Psychological expectancies are people's assessments of their chances for success at a goal or a task. People make at least two kinds of assessments when they judge their chances for success. They assess their own performance competence, the likelihood they can perform well at the task provided they try. They also have to assess the probability that the environment (experimenter, teacher, work supervisor, personnel officer, etc.) will give the reward that is presumably contingent on good performance. Most research carried out by psychologists has examined the impact of success expectancies based on the assessments subjects make of their own performance potential. These expectancies of success influence effort,[1] persistence,[2] overall aspirations,[3] and actual performance on experimental tasks and to some extent in natural work settings.[4]

All of these indicators of behavior or resultant states of motivation may also be affected by other motivational dispositions as well. The achievement motivation theories of McClelland[5] and Atkinson[6] suggest that overall level of motivation as well as actual behavior are affected not only by expectancies but also by motives, the inner gratification provided. This means that any motivated behavior may result from several different aspects of motivation. People who actively search for better jobs or a new job when unemployed appear to be motivated but their motivation may result from positive motives (high need for achievement, low fear of success, low fear of failure, high stress on material success and so on) and/or from positive expectancies of being successful in the job search.[7] Lower job aspirations or lower career commitment may result from lower achievement motives, stronger interpersonal or affiliative motives, stronger familism values or needs but they may also stem from expectancies that effort devoted to achieving more prestigious or better paying jobs would likely fail any way. The distinction between expectancies and motives particularly needs to be drawn in applying concepts of motivation to labor market behavior because psychologists usually assume that expectancies are much easier to modify than motives are. Because motives presumably develop from early family and school influences, they are viewed as reasonably stable personal characteristics of the individual. Motives (or needs or values as terms sometimes used almost interchangeably with motives as stable motivational dispositions) are the personal assets (or liabilities) people bring to the market from their earlier socialization experiences. Expectancies, by contrast, reflect the individual's current as well as earlier experiences and change quite easily as the current situation changes. Indeed, most experimental research on the effects of providing success v. failure for the changing of expectancies shows that people change expectancies easily, rapidly, and realistically in response to the objective situation. If the situation provides (or manipulates) more successes than failures, most subjects respond by raising their expectancies of success at that task. If the situation programs more failures than successes, most subjects lower their expectancies.[8] It is thus reasonable to expect that the expectancy component of motivation may be far more sensitive than motives to labor market experiences and to interventions aimed at controlling race and sex discrimination or at affirmatively expanding opportunities for women and minorities.

Recent theories and empirical work on current discrimination as a source of race and sex differentials in employment status and earnings also support our contention that psychological expectancies need to be investigated if we are to understand how discrimination operates and then affects the subsequent behavior of women and minorities. The emphasis in human capital theory on the individual's choice on what fraction of time to devote to production of human capital and what fraction to rent to employers,[9] in sacrificing current earnings for training opportunities that will have future payoff, in choosing jobs early in the career with maximal training opportunities[10] likewise leads to the need for serious attention to worker's psychological expectancies, perception of alternatives, and beliefs about how the market operates. But it is particularly some of the newer economic hypotheses about market discrimination that strengthen our view that psychological expectancies are the central motivational constructs to be drawn from psychology for analyses of labor market behavior.

The standard view about wage discrimination until very recently emphasized productivity differences between workers earning higher and lower wages. This emphasis on productivity also fit well with an emphasis on motivational deficiencies that were considered stable problems certain classes of workers brought to the market. How did this convergence between a productivity theme in the discrimination literature and stable motivational deficiencies in the psychological literature occur? The standard assumption that the market is a rational, competitive mechanism led most economists to argue that race and sex differentials in wages simply could not result from employer discrimination. Paying unequal wages to equally qualified and productive workers would threaten employer profits in a competitive market. Race and sex discrimination would thus require the unlikely conscious collusion of all employers to agree to express their prejudices against minority and women workers (referred to as "tastes for discrimination.")[11] With this view of discrimination, most economists understandably believed that wage differences between blacks and whites or men and women must result from race or sex differences in actual productivity or more typically in productivity proxies since actual behavior was rarely measured. Standard research strategies were developed. Most studies depended on regression techniques to assess how much the wage differentials would be reduced by adjusting for race and sex differences in these productivity proxies -- schooling, age, marital status, number of children, full vs. part-time work, length and continuity of labor force participation, occupational position, and so on. The size of the reduction obviously depends on how many and which productivity proxies are included in the regressions, and the orthodox are never convinced in any case that the residual represents wage discrimination since additional proxies can always be suggested. This is exactly why psychological variables have been invoked occasionally. When discussed at all, motivational characteristics of workers have been advanced as additional explanatory variables that might further reduce the residual not accounted for by standard productivity proxies. Since this whole strategy is motivated by the view that the market itself functions efficiently, it has led to emphasizing motivational deficiencies that some classes of workers bring to the market and thus justify their lower wages. For example, this traditional approach would suggest that women earn less than comparably educated men of the same age because they are less motivated by the need for achievement or they are inhibited by fear of success. Even women who approximate the participation of men may still earn less because they may prefer jobs which demand less ability and thus provide lower pay. Women's (or minorities') needs and preferences are stressed as additional productivity proxies that explain why they legitimately earn less than white male workers. The choice of needs, motives, and preferences among the many psychological concepts in motivation thus fits with the view that it is these early socialized, stable deficiencies of individual workers, rather than market imperfections or organizational/institutional biases, that accounts for income differentials in our society.

This standard view has been challenged by economists in recent years and the newer theories, not yet well supported by empirical work, suggest that difference psychological issues need to be studied. Some of the newer approaches[12] keep much of the neoclassical framework and do not preclude the existence of pure wage discrimination that follows from "discriminatory tastes" of employers. But they add important elements that have not been considered seriously in the past. Phelps'[13] so-called statistical theory of sex discrimination emphasizes that employers who are attempting to maximize expected profits take sex of job applicant (or race of applicant) to represent (inferior) characteristics, and whether valid or not Phelps demonstrates that discrimination is the outcome. Bergmann's[14] revival of the "crowding hypothesis" abandons the idea of a perfectly competitive labor market and suggests that discrimination occurs by exclusion through unequal access to some types of jobs. Women are crowded into a small number of occupations by the preferences and power of men and the crowding depresses the marginal productivity of women (or men in female-typed jobs) in the female segment of the market. This hypothesis is compatible with work on dual labor markets in which certain classes of workers end up in jobs with little protection, security, and lower wages.[15] Still another recent development is the attention given to monopsony in which the market power of certain firms or male-employee monopoly power over labor supply can result in discrimination without threatening employer profits.[16]

While different in emphasis, all of these recent developments stress that something about the market itself may be influencing occupational differentiation and wage differentials by race and sex. They all lead to the possibility that workers' perceptions of how the market operates may result in important supply characteristics. Equally trained, equally productive workers with the same need for achievement and equal preference for job challenge may supply themselves differently if their market experiences have convinced one group that their opportunities and alternatives are more restricted. We suggest that this may well happen for black men and women and for white women. Women's and minorities' perceptions of alternatives and beliefs about opportunities that have been reinforced from their previous market experiences may further reinforce sex segregation in the labor pool and/or make for different supply elasticities for women and minorities. They may not as often apply for advanced training or change to jobs with optimal training opportunities if they have already encountered discrimination, either in the form of wage discrimination or in trying to get into training programs such as those controlled by unions.[17] They may not as frequently ask for promotions if their previous experiences have decreased their expectancies that such efforts would be successful anyway. They may be more wiling to settle for lower status or lower paying jobs if they believe that their opportunities for better jobs are limited, if they are geographically less mobile, if they have less access to job information by knowing fewer people already occupying better jobs or jobs in better paying sectors of the market, or they are aware that worker monopolies control access to jobs they might prefer. In short, market segmentation, market imperfections, or even the less probable phenomenon of "pure wage discrimination" affects workers' views of the market and their chances for success, the alternatives open to them, and the wisdom of current investment efforts in light of probable pay-offs. If we are to understand how wage differences occur, we need to study workers' experiences in the market and the effects of these experiences on their expectancies about current and future success.

The fact that empirical work on wage discrimination also points to occupational differentiation as a major mechanism by which wage differentials result further supports the importance of studying workers' perceptions of the market, their experiences in finding jobs, and their future expectancies. Occupational placement or "access discrimination" seems particularly critical in explaining wage differentials by sex,[18] although occupational differentiation in which black men also end up in the lower end of almost all job categories also needs further study.[19] Studies of sex differentials in wages generally agree that sex differences remain sizeable even after occupational characteristics are controlled[20] but they also concur that more of the wage difference is explained by such characteristics, particularly by industry site, census classification of the job, and type of employment (private vs. government, self vs. working for others, union vs. non-union), than by other supply determinants, even work commitment, marital status, and education.[21] There is also general agreement that at least some productivity characteristics with high wage returns for white men do not provide equal returns to black men[22] or to women.[23] There is also more evidence now that sex segregation in the market (both in the sense of sex typing of job and sex of worker) is a powerful determinant of why women of both races earn less than men.[24] Information is therefore needed about the ways in which women are channeled into female jobs or into sex-segregated subcategories of male jobs, and how women who hold the same jobs as men end up in different industry sites. Questions about channeling mechanisms also need to be studied if we are to understand how a disproportionate number of black workers, both men and women, end up in the irregular economy and how black men with comparable education to white men do not end up in exactly the same jobs within a general job category. Subtle mechanisms of occupational channeling would seem even more important as pure wage discrimination (paying two workers in exactly the same job different wages) becomes less probable. Research on discrimination must tackle the access and placement mechanisms by which wage differences occur. Although the research reported here does not address these channeling mechanisms directly, it takes a first step by describing the experiences and perceptions of obstacles that black and white men and women report about their efforts to alter their market positions.

Outline of This Report

Chapter II describes the sample and measures used in the analyses reported here. Chapter III describes the market experiences, perception of obstacles, and current expectancies of black and white men and women. Chapter IV examines the interrelationships of these variables with particular focus on the effects of years of schooling and previous market experiences on current expectancies. Chapter V presents a general causal model in which expectancies are viewed as intervening influences between current market outcomes and variables at two earlier stages, original educational attainment at stage one and subsequent market experiences at stage two. Three types of current market outcomes are analyzed. The model is applied first to the job status of blacks and whites. The total effects of race and years of schooling are decomposed into their direct effects and their indirect effects through workers' previous market experiences and their sense of personal efficacy. The second application of the model focuses on women's and men's search behavior, specifically whether the women and men who are interested in changing jobs are actually looking at the present time. This analysis is carried out only for white men and women since the already small sample of blacks is just too small for reliable results when only those interested in changing jobs are included for analysis. The third analysis applies the general model to the work intentions of white housewives. The sample of black housewives is again too small for internal causal analyses of that group. The total effect of previous education on future employment intentions is decomposed into its direct effect and indirect effects through housewives' previous efforts to improve their market value (primarily through acquiring additional education), their previous work experience, and their current expectancies about being able to find a job if they were to try.

The results from the causal analyses are limited by the cross-sectional nature of the data. The time frame in which the questions were asked legimates making assumptions about causal direction but in no way substitutes for a longitudinal design in which the causal relationships depicted in our general model may be studied dynamically. The major value of the research lies in the descriptive material about the market experiences, perception of obstacles, attributions for success and failure in the market, and future expectancies of black and white men and women. The correlational results about the interrelationships of these variables, and their relationships to market behaviors, provide suggestive but exciting directions for future longitudinal research. We offer suggestions in the final chapter about the types of expectancy and experience measures and the design that will be needed to extend this line of interdisciplinary labor market research.

CHAPTER II

PROCEDURES

Sample

Individuals interviewed in the 1972 American National Election Study were a representative cross-section of persons 18 years of age or older (as of election day, November 7, 1972) who were U. S. citizens and were living in private households in the coterminous United States. The twelve largest metropolitan areas of the United States were drawn with certainty. The rest of the country was formed into 62 strata, each of which contained two or more primary sampling units. From each stratum a primary sampling unit (consisting of a county or a group of counties) was drawn with probability proportional to its 1970 population. Seventy-four PSUs were drawn and the selection procedure within these PSUs yielded a sample of private households. Respondents were selected from households by an objective selection procedure which allowed no substitutions. Individuals living in group quarters (barracks, dormitories, rooming houses, etc.), institutional populations (hospitals, homes for the aged, etc.) and persons with no place of residence were not included in the sample. The sample is representative of the four major regions (Northwest, North Central, South and West) of the United States as well as of the entire United States.

Individuals were interviewed both before and after the national election. The pre-election interviews were conducted between September 5, and November 6, 1972; the overall response rate for the pre-election survey was 75.1%. The post-election interviews were conducted between November 8, 1972 and February 11, 1973 with 2181 of the 2705 individuals who responded to the pre-election interview. The overall reinterview rate of 80.9% was approximately the same for all race and sex groups. The reinterview rate for white men was 80%, for white women 81%, for black men 77%, for black women 83%.

Analysis Groups

Unlike the 1964, 1968, and 1970 election studies, the 1972 study does not contain a supplement of black respondents. Since the analyses reported here involve data from both the pre- and post-election interviews and also depend on the work status of respondents, it may be helpful to detail the number of black and white men and women who are included in the major analyses. Since most of the market experience and expectancy measures were collected in the post-election interview, the analyses are carried out only for respondents who were reinterviewed in the post-election study. Most of the results are also based on information from non-housewives, including respondents who were employed, retired, unemployed or students. This includes 850 white men, 542 white women, 79 black men and 100 black women reinterviewed in the post-election study. The causal analysis of race differences in occupational status therefore included, 1392 whites and 179 blacks. The causal analysis of sex differences in job search behavior among people interested in a job shift was carried out only for white respondents (124 men and 75 women) since the already small sample of blacks was reduced too greatly by making the analysis contingent on interest in a job shift.

The causal analysis of housewives' employment intentions was also carried out only for white women (554) since the already small sample of black women included only 46 housewives.

Measures

Past Market Experience and Perception of Obstacles

Respondents in the post-election interview were asked: "Was there ever a time when you tried to change what you were doing -- for example, entered a training program, went back to school, tried to go into a different type of work -- things that would really change what you were doing?" Respondents who had tried to do something were then asked: "What did you try to do?" Responses to this probe were coded with a double column code to preserve as much detail as possible within four broad categories: educational changes, job training changes, work changes, and other attempts at qualifying for better positions. Although most respondents mentioned only one attempt, two responses were coded for the few who mentioned more than one. Following this probe, respondents were then asked: "What happened -- did you finish or accomplish what you were trying to do?" Six levels of success were coded from responses to this question, ranging from "completed what tried to do and it led to desired improvement," to "clearly not successful in respondent's eyes: did not complete what tried." Finally, those respondents who felt any lack of success in the effort were asked: "Why weren't you able to do it?" Responses to this question were coded with a double-column code for nine types of external reasons, five types of internal reasons and a category for reasons that could not be judged as either internal or external. Race and sex differences described in Chapter III are based on these detailed codes so as to preserve the richness in the coding. We also developed several summary indices for analytic variables from these questions. These include:

four dichotomous variables -- tried, didn't try to change;

tried work change, didn't try anything or something other than work;

tried educational change, didn't try anything or something other than education.

and one variable with three categories -- level of success (clearly successful, not clearly successful or unsuccessful, clearly unsuccessful).

Respondents were also asked two structured questions in the pre-election interview that we have treated as generalized market experience variables although the questions did not specifically refer to the labor market. "Do you think you have had a fair opportunity to make the most of yourself in life, or have you been held back in some ways?" and "Up to now, have you been able to satisfy most of your ambitions in life or have you had to settle for less than you had hoped for?" Respondents who felt they had been held back and/or felt they have had to settle for less than they had hoped were then probed for reasons, specifically: "What are the main things that have stood in your way," and "Why have you had to settle for less?" As many as two responses to each probe were coded with a two column code. We also developed several summary indices from responses to these probes that were used as analytic variables measuring perception of obstacles:

number of times R attributed difficulty to market constraints (lack of opportunity, not further specified; lack of jobs, race or sex discrimination);

number of times difficulty attributed to educational deficiency (didn't get enough education, quit school, wasn't qualified educationally);

number of times difficulty attributed to family obligations (health of spouse or children, responsibility for rearing children, responsibility to provide financially for spouse and/or children, lack of encouragement from spouse, death of spouse, family problems not further specified);

number of times difficulty attributed to respondent's motivational deficiencies (lack of confidence, goals unrealistic, lack of motivation, laziness or didn't work hard enough, lack of direction and planning);

number of times difficulty attributed to ability deficiencies (lack of ability for the job; inability to learn what it took).

A few additional structured questions asked in the post-election interview were also treated as market experience variables. "Have you ever felt that you were limited in getting a job or promotion you really wanted or might want in the future because of your education?" Responses were coded "yes" or "no." "Do you feel that your race, nationality or religion had anything to do with promotions or getting a better job -- has it helped you, held you back, or meant nothing in your case?" Women were asked: "Do you think that being a woman has had anything to do with your job experience -- how good a job you could get, your salary, chances for promotion, or anything like that?" Women who felt they had been affected were then asked: "Has it helped you or held you back?" For analytic purposes these were treated as dichotomous responses as follows: held back, not held back by education; held back, not held back (or helped by race and nationality); held back, not held back (or helped) by being a woman.

All of these measures pertain directly to the respondent's *own* experience. We were also interested in the rspondent's *beliefs or ideology* about possible inequities in the way the market operates for women and blacks. "Consciousness raising" among discriminated groups involves two processes that may affect individuals' expectancies and future labor market behaviors. One process results in a system-blame ideology through broadening the individual's awareness that personal experiences with discrimination are not unique but include others in one's group; the other process likewise encourages a system rather than victim blame ideology by helping individuals who have *not* experienced personal discrimination to become "conscious of collective discrimination." We were interested in the role that such group conscious ideology might play in the personal expectancies and current market behaviors of women and blacks. We defined the ideology as causal attributions about market inequity. Individual blame explanations attributed obstacles or wage differentials to individual deficiencies of group members; system blame explanations attributed them to system deficiencies. We included in the national election study the same individual-system blame measure of race inequity that we had used previously in a series of studies with students at historically black colleges.[25] Respondents were asked to choose between two statements that attribute responsibility for market differentials of blacks and whites either to personal deficiencies of individual blacks or to race discrimination and other social determinants. An example of the *five item race individual-system blame index* is: "It's lack of skill and abilities that keeps many black people from getting a job. It's not just because they're black. When a black person is trained to do something, he is able to get a job," vs. "Many qualified black people can't get a good job. White people with the same skills wouldn't have any trouble." The internal consistency (coefficient alpha) of the index formed by the summing of five such items was .68. We also wrote new items that we hoped would measure the same concept for the market inequities faced by women. Factor analyses resulted in a four item women *individual-system blame* index. An example is: "Men have more of the top jobs because they are born with more drive to be ambitious and successful than women," vs. "Men have more of the top jobs because our society discriminates against women."

Current Expectancies

A global job (employment) expectancy measure involved asking slightly different questions of the currently employed, students, and unemployed groups. Currently employed respondents were asked: "If you should lose your present job, what would you say were your chances of finding another job that was just as good as your present job in all respects?" Students and unemployed workers were asked what kind of job they wanted to find and then were asked: "What do you think your chances are of getting that kind of job." All respondents chose among four alternatives (very good, good, not so good, and not good at all) and then were asked: "Why do you feel that way?" Reasons that respondents gave that their chances were good were coded separately from those explaining why their chances were bad. A competence or performance based expectancy was then measured by asking the currently employed (compared to most other people doing your kind of work) and students and unemployed (compared to most other people doing the kind of work you want to get into), "How much ability do you think you have?" Respondents chose among four alternatives: much more, a little more, about the same, and a little less.

Housewives were asked only a generalized job (employment) expectancy question: "Suppose you wanted to go to work now, do you think you would be able to find a job easily?" Respondents answered "yes" or "no."

All respondents were asked four questions that have been used to indicate personal efficacy in many Survey Research Center studies: "Do you think it's better to plan your life a good way ahead, or would you say life is too much a matter of luck to plan ahead very far?" "When you do make plans ahead, do you usually get to carry out things the way you expected, or do things usually come up to make you change your plans?" "Have you usually felt pretty sure that your life would work out the way you want it to, or have there been times when you haven't been sure about it?" and "Some people feel they can run their lives pretty much the way they want; others feel the problems of life are sometimes too big for them. Which one are you most like?" The coefficient alpha of the summary score was .74.

Current Market Behaviors and Job Status

The job status of the occupations presently held by employed persons or of the occupation most recently held by students or unemployed persons was measured using the Duncan Decile Score.[26] Two questions were asked to explore current search behavior. "Have you been thinking about getting a new job in the next year or so, or will you keep the job you have now?" Respondents who indicated thinking about a job change were then asked: "Have you been doing anything in particular about it?" The "yes-no" responses to this question formed the measure of current search behavior.

Current Job Aspirations of Housewives

Desire for a job (ideal goal) was asked as follows: "If you could have someone to take care of things here at home, would you like to take an outside job right now, or are you happy enough to be at home?" Job intention (actual goal) was measured: "Do you think you are likely to take an outside job in the future?" Respondents answered "yes," "uncertain" or "no."

Demographic Variables Used as Stage One or Control Variables

Level of educational attainment: Respondents were asked the following questions about their educations. "How many grades of school did you finish?" If the respondent indicated less than 12, the interviewer asked: "Do you have a high school equivalency diploma or certification?" All respondents were then asked: "Have you had any other schooling?" and "What was that?" Respondents who had attended college were asked: "Do you have a college degree?" Respondents with a college degree were then asked, "What degree(s) have you received?" The highest level of education was coded from responses to these questions and seven analytic categories were formed, ranging from less than 8th grade education to post-master's degree.

Since number of years of work experience was not measured, we included the respondent's actual age as an estimator of work experience. Housewives were also asked if they had done any work for pay during the previous year.

CHAPTER III

PAST MARKET EXPERIENCES, CAUSAL ATTRIBUTIONS, CURRENT EXPECTANCIES AND MARKET BEHAVIORS OF BLACK AND WHITE MEN AND WOMEN EMPLOYED WORKERS

Past Efforts at Improving Market Success

The four groups of presently employed workers differed more in the types of changes they had attempted to make to improve their market position than in whether they had tried anything at all. Approximately the same proportion of white men (43%), black men (34%), and black women (35%) said they had tried to make some kind of change. Only white women differed and then only significantly from white men: fewer white women (26%) reported having made some attempt at improvement. The level of activity among those who had tried something was also comparable in the four groups. Approximately three-quarters of each of the groups reported one change attempt; another fifth reported two efforts; and about five percent of each of the groups said they had tried three or more different things. (See Table 1 for a summary of mean differences by sex and race of past market experiences.)

Men differed considerably from women, however, in the kinds of changes they had tried. More men (51% white, 56% black) than women (40% white, 18% black) had tried some kind of work change or advanced on-the-job training. By contrast, more women (60% white, 82% black) than men (46% white, 44% black) reported efforts to improve their educations. Work changes were thus distinctively male, educational changes distinctively female. Black women particularly stood out, even in comparison with white women, in the predominance of educational over work changes. (See Table 1 for Scheffé comparisons showing that black women tried work changes significantly less often and tried educational changes significantly more often than all other groups.)

What kinds of work changes had these employed workers tried? Although the modal work-related response of all groups was changing jobs or line of work, this was particularly true of white men and somewhat less true of black men, more of whom also spoke about on-the-job training. A similar constrast can be made among women. Changing jobs was reported far more than any other work change by white women, while nearly an equal proportion of the few black women who had tried something in the work area reported job training and job shifts (see Table 2).

The type of educational changes mentioned by all the groups was fairly similar. Technical programs led the list for all groups; entering or returning to college was next most frequent for all but black women, a large number of whose responses were not codable for exact level of education.

The male edge for work and female edge for educational changes did not reflect differences in the educational attainments of the four groups. In the first place, educational differences were not sizeable, although a slightly smaller proportion of black women in the sample had

Table 1

Past Market Experiences by Race and Sex (Non-Housewives)

		White Men	White Women	Black Men	Black Women
Tried something to alter market position "Was there ever a time when you tried to change what you were doing?"		(850)	(542)	(79)	(100)
1 = Tried something; 5 = Didn't try	$\bar{X}$	3.26	3.58	3.43	3.46
	SD	1.98	1.91	1.91	1.96

Overall F=3.32, p=.01(3,1568 df)
Equality variances F=(NS)
Scheffė contrasts, race effect (NS)
Scheffė contrasts, sex effect (NS)
Scheffė contrasts, white male effect, F=5.89, p=.01
Scheffė contrasts, white men greater than white women, p=.003
Scheffė contrasts white male comparisons with black men and black women not significant

		White Men	White Women	Black Men	Black Women
Tried work change or job training (among respondents who tried something)		(365)	(191)	(27)	(38)
1 = Tried work; 2 = Tried something else	$\bar{X}$	1.48	1.58	1.52	1.84
	SD	.50	.50	.51	.37

Overall F=6.63, p=.0002 (3,627 df)
Equality variances F=(NS)
Scheffė contrasts, race effect (NS)
Scheffė contrasts, sex effect F=9.94, p=.001
Scheffė contrasts, white male effect F=10.26, p=.001
Scheffė contrasts, white men greater than black women, p=.0001 and white women, black women also less than black men, p=.009 and white women, p=.002.

Table 1 (continued)

Past Market Experiences by Race and Sex (Non-Housewives)

		White Men	White Women	Black Men	Black Women
Tried educational change (among respondents who tried something)		(365)	(191)	(27)	(38)
1 = Tried education	X̄	1.49	1.38	1.52	1.15
2 = Tried something else	SD	.50	.49	.51	.37

Overall F=6.60, p=.0002 (3,617 df)
Equality variances F=(NS)
Scheffè contrasts, race effect (NS)
Scheffè contrasts, sex effect F=12.83, p=.0004
Scheffè contrasts, white male effect F=7.60, p=.006
Scheffè contrasts, white men less than black women, p=.0001 and white women, p=.01; black women also more than black men, p=.003, white women, p=.01

		White Men	White Women	Black Men	Black Women
Respondent's subjective evaluation of level of success in change effort (among respondents who tried something)					
1 = Clear success;					
2 = Moderate;	X̄	1.87	1.83	1.92	2.05
3 = Clear lack of success	SD	.89	.88	.87	.81

Overall F=(NS)
Equality variances F=(NS)

Table 2

Market Changes Respondents Had Tried to Make, by Race and Sex

	White Men (365)	White Women (191)	Black Men (27)	Black Women (38)
Educational Changes	46%	60%	44%	82%
More education, not clear what level	12	12	7	29
Returned to high school (or less)	3	4	4	4
Technical or non-college professional school	16	24	18	36
College level or above where degree or at least whole program implied	10	16	15	11
College level or above where just a few courses implied	5	4	0	2
Job Training	5%	3%	15%	8%
Advanced training on job or any kind of on-the-job training; apprenticeship program offered by unions or company				
Work Changes	46%	37%	41%	10%
Changed jobs (or line of work)	39	29	29	10
Tried going into business for self	4	3	7	0
Other work changes	3	5	5	0
Other	3%	0	0	0
	100%	100%	100%	100%

$X^2 = 68.9$, cc = .29
27 df, $p = .001$

gone to college (17% compared to 38% of the white men, 26% of the black men, and 25% of the white women). Further, the differences in what respondents had tried to do held up even when they were examined just for people who had not gone to college. Even in the non-college sample, more women (56% white, 80% black) than men (42% white, 40% black) talked about educational changes; more men (56% white, 59% black) than women (44% white, 20% black) talked about work changes. (Likewise, the mean differences between the groups reported in Table 1 as significant remained so when level of education was covaried.)

Perception of Obstacles and Causal Attributions

We expected strong race effects in the extent to which respondents felt they had met obstacles in the market and had been held back in life. We also expected that white women would report a greater sense of restriction than white men. Responses to the two global questions about opportunity and constraint support these predictions. More black than white respondents felt they had been held back in response to the question: "Do you think you have had a fair opportunity to make the most of yourself in life, or have you been held back in some way?" More black than white respondents also said they had settled for less than they had hoped in response to the question: "Up to now, have you been able to satisfy most of your ambitions in life or have you had to settle for less than you had hoped?" (See Table 3 for mean differences by race and sex in response to these questions.) In addition, more white women than white men reported feeling held back, although they did not differ in the extent to which they felt they had settled for less than they had hoped (see Scheffe comparison in Table 3).

Table 3

Perception of Obstacles by Race and Sex (Non-Housewives)

		White Men	White Women	Black Men	Black Women
		(850)	(542)	(79)	(100)
Sense of being held back "Do you think you have had a fair opportunity to make the most of yourself in life, or have you been held back in some ways?"					
1 = Fair opportunity;	$\bar{X}$	1.77	1.97	3.56	3.38
5 = Held back	SD	1.56	1.71	1.93	1.97

Overall F=48.59, p=.0001 (3,1568 df)
Equality variances, F=5.07, p=.002
Scheffè contrasts, race effect F=136.43, p=.0001
Scheffè contrasts, sex effect F(NS)
Scheffè contrasts, white male effect F=126.5, p=.0001
Scheffè contrasts, white men less than white women, p=.03; also black men, p=.0001, and black women, p=.0001.

		White Men	White Women	Black Men	Black Women
Sense of having settled for less than had hoped "Up to now, have you been able to satisfy most of your ambitions in life or have you had to settle for less than you had hoped?"					
1 = Satisfied most;	$\bar{X}$	2.41	2.39	3.48	3.14
5 = Had to settle for less	SD	1.90	1.89	1.89	1.98

Overall F=14.53, p=.001 (3.1568 df)
Equality variances F(NS)
Scheffè contrasts, race effect F=42.30, p=.0001
Scheffè contrasts, sex effect F(NS)

The reasons offered for feeling restricted by these four groups of employed workers show some strong race effects, some strong sex effects, and some similarities. Let us look first at the reasons respondents offered in probes to why they felt held back, had settled for less than they had hoped, and why they had not been completely successful in their efforts to improve their market situation. We applied the same coding categories for measuring causal attributions to the responses offered to all three of these questions. Six major dimensions were coded. Causality attributed to market constraints was coded when respondents mentioned any of the following: lack of jobs (I couldn't find the job or situation I wanted; not enough jobs in the field I was in; the company closed and I couldn't find as good a situation after that); promotional difficulties (I wasn't promoted at the time I should have been); race discrimination (prejudice in the field I was in, my race wasn't wanted; downright race discrimination; segregated jobs meant I couldn't get out of the low-level situation I was in; blacks weren't promoted in the company I worked for); sex discrimination (women weren't accepted in the field I wanted to go into; a woman couldn't get a good job; women weren't promoted); military service (the war interrupted what I was trying and I could never get back into it); the system, society (no opportunity in this kind of society); general lack of opportunity not further specified. Educational deficiency was coded when respondents mentioned either not enough schooling (or training) or poor quality education. Family obligations were coded when respondents talked about any of the following: general reference to marriage, parenthood, family problems not further specified; health of family members (had to take care of relatives; health of spouse; children's illnesses); child rearing responsibilities; financial responsibilities for family members (I had the financial worry of my whole family; I had to help out other relatives); discouraged by family members (spouse didn't want me to do it; lack of encouragement from relatives, spouse, children). Financial difficulties were coded when respondents referred to problems other than family financial obligations (I didn't have the money to do what I wanted; it cost too much to go to school; I needed a lot more capital than I had). Motivational deficiencies were coded when respondents said they either lacked motivation (didn't apply myself; didn't work hard enough) or lacked appropriate goal direction (my goals were unrealistic; I didn't plan ahead enough; I just didn't have much sense of direction when it was needed). Ability deficiencies were coded whenever reference was made to the word ability or not being smart enough or intelligent enough. References to lack of skills almost always were cast as insufficient education (or training) and were coded as educational deficiencies. The final six measures indicated the number of times the respondent mentioned each of these dimensions. Since two possible responses were coded for each of three questions, the possible range for each of the six measures is 0-6.

Motivational and ability attributions were far less frequent than the various external, situational reasons offered by respondents. Less than one percent of the sample talked about ability deficiencies even once. Motivational deficiencies were mentioned somewhat more frequently; five percent talked about motivational problems once. Only three respondents as often as twice attributed their difficulties to personal motivation. By contrast, all of the other dimensions were mentioned much more frequently: market constraints at least once by 32% of the sample, family obligations by 26%, financial difficulties by 25%, and educational deficiencies by 18%. This strikingly greater stress on situational attributions than on either ability or motivational deficiencies has been noted in experimental studies on attribution as well. Jones and Nisbett[28] show in an important psychological experiment on attribution processes that subjects more often attribute causes of events to external, environmental forces than to internal, personal influences when the event involves themselves as actors. By contrast, subjects more frequently attribute the causes of events involving other people to personal than to situational determinants. When we judge other people we are more apt to make psychological judgments involving personal causation; when we judge ourselves we are more apt to look for causes in the environment.

Within this preference shared by all groups for the more situational explanations, some attributions nonetheless were more characteristic of blacks than of whites; others were more frequently mentioned by women than by men. Only financial difficulties were reported approximately the same number of times by all four groups (see Table 4). Two types of group differences in attributions to market constraints, educational deficiencies, and family obligations should be noted in Table 4. In the first place, the four groups' differed in

Table 4

Causal Attributions for Being Held Back or Having had to Settle, and for Job Market Difficulties, by Sex and Race

Attributions		White Men (693)	White Women (479)	Black Men (72)	Black Women (93)
Number times R mentioned market constraints Range 0-5	$\bar{X}$	.34	.34	.85	.83
	SD	.59	.58	.88	1.21
	Overall F=26.36, p=.01 (3,1336 df) Equality of variances, F=49.22, p=.0001 Scheffè contrasts, race effect F=78.10, p=.0001 Scheffè contrasts, sex effect F(NS)				
Number times R mentioned educational deficiencies Range 0=3	$\bar{X}$	.17	.21	.53	.27
	SD	.42	.53	.82	.53
	Overall F=12.08, p=.05 (3,1336 df) Equality of variances, F=31.88, p=.0001 Scheffè contrasts, race effect F=24.84, p=.01 Scheffè contrasts, sex effect F(NS) Scheffè contrasts, white male effect F=26.93, p=.01 Scheffè contrasts, white men less than white women, p=.06; black men, p=.01; black women, p=.06 Scheffè contrasts, white women less than black men, p=.01 Scheffè contrasts black women less than black men, p=.65				
Number times R mentioned family obligations Range 0=4	$\bar{X}$	.20	.54	.20	.58
	SD	.48	.73	.48	.83
	Overall F=18.51, p=.01 (3,1336 df) Equality of variances, F=23.59, p=.0001 Scheffè comparisons, race effect F(NS) Scheffè comparisons, sex effect F=36.89, p=.001				

Table 4 (continued)

Causal Attributions for Being Held Back or Having Had to Settle, and for Job Market Difficulties, by Sex and Race

Attributions		White Men (693)	White Women (479)	Black Men (72)	Black Women (93)
Number times R mentioned financial difficulties Range 0-1	$\bar{X}$	.21	.33	.19	.25
	SD	.41	.47	.39	.43
	Overall F(NS) Equality of variances, F(NS)				
Number of times R mentioned ability deficiencies Range 0-1	$\bar{X}$	.005	.004	0.	0.
	SD	.07	.06	0.	0.
	Statistics were not computed since there was no variance in the black sample				
Number of times R mentioned motivational deficiencies Range 0-1	$\bar{X}$	.069	.044	.014	.032
	SD	.27	.20	.12	.18
	Overall F(NS) Equality of variances, F=34.39, p=.0001				

the variation in their scores on these three dimensions. The actual range of market constraint attributions offered by blacks was considerably greater than the range given by whites. The number of educational deficiencies mentioned by black men was likewise more variable than in the other three groups. Number of family obligations showed greater variability among women, both black and white, than among men. Variability thus seems to be greater when a particular environmental obstacle is unusually central and more problematic to the group. It is not simply that women stressed family obligations more than men but that the range of concern with family obligations was much greater among women than among men.

While interesting in itself, this inequality of variances raises questions about the appropriateness of testing for mean differences among the groups. Although the F test for mean differences is robust and can tolerate violation of the homoscedasticity assumption, these differences in variances were highly significant. Since we were typically interested in no more than three contrasts, we used a significance level at one third alpha based on Bonferroni inequality.[29] Even viewed more conservatively, the results show a clear race effect in number of times market constraints were mentioned and a clear sex effect in stress on family obligations. Blacks more often talked about market constraints; women more often talked about family obligations. Race and sex interacted with stress on educational deficiencies. Among whites, women stressed educational problems more; among blacks, men did so. The Scheffé comparisons in Table 4 indicate that white men stressed educational deficiencies less than all other groups, while black men stressed them more than all others.

Black men also stressed educational deficiencies more than all other groups in response to a structured question asked of all respondents: "Have you ever felt that you were limited in getting a job or promotion you really wanted or might want in the future because of your education?" Although the race effect was significant, showing that black women too felt more restricted than whites by educational limitations, the Scheffé comparisons noted in Table 5 show that black men stand out from all groups, including black women. The race effect was even stronger in responses to a structured question directly about race, nationality, and religion: "Do you feel that your race, nationality, or religion has had anything to do with promotions or getting a better job?" Forty-four percent of the black respondents (54% men and 40% women) but only 3% of the whites felt it had affected their market success (see Table 5). (The variability in blacks' responses to this question specifically about market discrimination was also significantly greater than in whites' responses, just as the variability in responses about market constraints to open-ended questions was also greater among blacks than among whites.) The perception by women that sex discrimination has affected them in the market was far less pronounced. Only 17% of the black women and 14%

Table 5

Causal Attributions from Structured Questions about Market Experiences, by Sex and Race

		White Men	White Women	Black Men	Black Women
		(850)	(542)	(79)	(100)
Have you ever felt that you were limited in getting a job or promotion you really wanted or might want in the future because of your education? 1 = Not held back; 5 = Held back	$\bar{X}$	1.40	1.26	2.83	2.11
	SD	1.90	1.86	1.83	2.00
	Overall F=19.11, p=.0001 (3,1568 df) Equality of variances, F(NS) Scheffé contrasts, race effect F=53.6, p=.0001 Scheffé contrasts, sex effect F(NS) Scheffé contrasts black men more than white men, p.=.0001; also white women, p=.0001; and black women, p=.01				
Do you feel that your race, nationality or religion had anything to do with promotions or getting a better job? 1 = Not held back; 5 = Held back	$\bar{X}$	2.93	2.97	4.04	3.74
	SD	.58	.49	1.25	1.06
	Overall F=103.36, p=.0001 (3,1568 df) Equality of variances, F=81.6, p=.0001 Scheffé contrasts, race effect F=301.82, p=.0001 Scheffé contrasts, sex effect F(NS)				

of the white women said that "being a woman had held them back in their job experiences -- getting a good job, wages, chances for promotion, and things like that." Other studies likewise have pointed out that women do not frequently attribute their job difficulties to sex discrimination. Women clearly think of sex discrimination as less restraining than blacks consider race discrimination. Moreover, despite the fact that a much larger share of black women's low wage position (lower than all other groups) is produced by sex than by race discrimination,[30] more black women focus on race discrimination (40%) than focus on sex discrimination (17%) in explaining their market position.

All of these questions referred specifically to the respondent's own situation. We also asked questions about the respondents' beliefs about general causes of group differences in market attainment. Media coverage of nondiscrimination legislation and affirmative action agreements had brought the attention of the public by 1972 to the market position of women and minorities. What did a national sample of Americans believe were the causes of sex and race differences in job position and wages? We have seen that few women focussed on sex discrimination in talking about their own market position, although they did talk about other environmental obstacles more than about personal deficiencies. What explanations did women offer for the general position of women in the labor market? Did they more often attribute the lower wages and occupational positions of women to environmental obstacles or to personal deficiencies (low aspirations, lack of ambition, preference for homemaking, less aggressiveness) that women bring to the market? Given typical attribution biases of seeing other people's difficulties as determined by personal deficiencies, women might be expected to talk about personal causation more in accounting for the market position of women generally than in explaining their own position. Likewise, men might be expected more than women to look for explanations in the personal deficiencies of women workers. Similarly, typical attribution biases would suggest that blacks would focus on individual blame explanations more in talking about the general position of black workers than in talking about their own market situation. And, whites more than blacks would likely offer personal attributions for race differentials in wages and job attainment.

Since we did not ask the same attribution questions regarding own and others' market position, we cannot reach definitive conclusions about some of these questions. The ideological attributions were measured by two indices, each developed from factor analyzing a set of forced-choice questions in which one alternative attributed women's (or black's) market situation to personal deficiencies of the group while the other alternative attributed it to discrimination (see Chapter II for examples of these items). What did women's responses to the individual-system blame ideology index reflect about greater willingness to use personal attributions in explaining other women's than in explaining their own market position. Even a cautious interpretation of their responses to questions that admittedly were cast differently for women in general and for themselves suggests that more women look to personal causation as a general ideology about sex differences than as an explanation for their own situations. Twenty-five percent of the women answered all of the four forced-choice individual-system blame questions by blaming women's deficiencies, while practically none of them talked about their own motivational or ability deficiencies. On the other hand, the willingness of women to focus on discrimination as an ideology for the cause of sex differences in the market was also greater than their sense of its role in their own situations. Slightly over a third of the women answered all four individual-system blame questions by blaming sex discrimination, although only 15% felt that being a woman had held them back in the market. Thus, women's ideologies departed from their explanations for their own situations in both directions. Blacks, too, more often stressed personal causation in their ideologies about the market positions of blacks and whites than in talking about their own experiences in the market. Five percent of the black respondents answered all five individual-system blame, and another 20% answered four of the five, alternatives by blaming personal deficiencies of black workers. We should be cautious about these results, however, since firm evidence about these issues would require asking exactly the same questions about others' and one's own situation.

The prediction that men more than women and whites more than blacks could be expected to adopt individualistic ideologies in which personal causation predominates was more easily testable since sex and race comparisons could be made on the same ideology measures. The results on whites' and blacks' attributions for race differentials in the market support general expectations from attribution research. Whites much more often than blacks blamed black workers themselves for their market difficulties. Nearly two-thirds of the white, but only one-quarter of the black, respondents answered at least four of the five individual-system blame alternatives by blaming personal deficiencies of blacks (see Table 6 for the mean differences on the race individual-system blame index.) The results on women's and men's attributions for sex differentials in the market counter general bias expectations, however. Sex differences in attributions about women's positions in the market were not significant and largely because black men attributed wage and job differentials to sex discrimination more frequently than white men, in fact as often as women did (see Table 6 for the mean differences on the sex individual-system blame index). White men stood out from all other groups in blaming women's personal deficiencies as causes of their market difficulties. The fact that white men look to personal causation at least as much as white women in explaining race differentials and more than all other groups in explaining sex differentials in the market makes their responses to affirmative action understandable. If women and blacks are to blame for their market difficulties, women and blacks, rather than employers, should change. The favored market position of white men is legitimated by their pattern of attributing market differentials to the personal deficiencies of other workers.

Table 6

Individual-System Blame Ideology about Race and Sex Differentials in Market Position, by Race and Sex

		White Men (850)	White Women (542)	Black Men (79)	Black Women (100)
Individual-system blame attributions for race differentials Range 0-5					
0 = Individual blame;	$\bar{X}$	1.32	1.29	3.11	2.82
5 = System blame	SD	1.43	1.53	1.52	1.74

Overall F=38.87, p=.0001 (3,1568 df)
Equality of variances, F(NS)
Scheffé contrasts, race effect F=115.8, p=.0001
Scheffé contrasts, sex effect F(NS)

		White Men (850)	White Women (542)	Black Men (79)	Black Women (100)
Individual-system blame attributions for sex differentials Range 0-4					
0 = Individual blame;	$\bar{X}$	1.81	2.04	2.25	2.51
4 = System blame	SD	1.46	1.54	1.32	1.41

Overall F=5.78, p=.0006 (3,1568 df)
Equality of variances, F(NS)
Scheffé contrasts, race effect F=8.72, p=.0001
Scheffé contrasts, sex effect F(NS)
Scheffé contrasts, white male effect F=15.48, p=.0001
Scheffé contrasts, white men more blaming of womens' deficiencies than white women, p=.01; also black men, p=.04; and black women, p=.0001

The significant effect of race on the sex system blame index (in which blacks, more than whites, chose system rather than individual blame explanations for sex differentials in the market) would not be predicted from the typical attribution bias. Blacks look to systemic explanations more than whites for sex as well as race differentials in the market. Black men particularly go beyond the typical phenomenon of looking to environmental obstacles for one's own, or one's own group's, situation. They stress sex discrimination as much as women did in accounting for women's market position. Blacks seem to have developed a more generalized ideology about the causes of economic inequities. (They also more frequently than whites attributed the causes of poverty to institutional and systemic problems on a Likert-type index comprised of six questions asking why the poor are poor. Although we are not using this measure systematically in the analyses reported here, it does support the attribution pattern discussed in this section.) By contrast, the results for white respondents can be understood as the typical tendency of people to look for personal causes of other people's difficulties. More whites, both men and women, attributed race differentials in the market to the personal deficiencies of blacks; more white men than white women attributed sex differentials in the market to the personal deficiencies of women. The results of the two groups that could counter typical bias expectations show that white women show the expected bias and black men do not. Since the original research on typical attribution biases was carried out with white subjects, these results might also question the "typicality" of the bias in the actor-observer perspective. The observer's disproportionate emphasis on personal causation may be typical for whites, or other people whose life experiences have protected them from seeing the force of system inequities, but clearly not for all people.

Current Job Expectancies and Generalized Sense of Personal Efficacy

Race and sex differences on the two job-specific expectancy measures were much less pronounced than the differences in market experiences, perception of obstacles, and causal attributions we have just described. One of these measures refers to the probability of finding a job as good as the respondent's present job, if employed, or a job that the unemployed or students in the sample aspired to. White men were the only group with significantly different expectancies; their level of expectancy was higher than all other groups of workers (see Table 7 for the Scheffé comparisons). White men also expressed the highest performance expectancies, measured by asking respondents to compare their abilities to most other people doing their kind of work, if employed, or the kind of work they wanted to do, if unemployed or still in school. White men felt significantly more self-confident about their job-related abilities than either white women or black women. They did not differ from black men (see Table 7 for the Scheffé comparisons).

Since these measures of expectancy were tied to the employed workers' current work, these results probably underestimate the white

Table 7

Job and Generalized Expectancies, by Race and Sex

		White Men	White Women	Black Men	Black Women
		(606)	(420)	(55)	(64)
Employment expectancy Chances of finding another job as good as present one (or finding job want to get, if student or unemployed) Range 1-5					
1 = Very good; 5 = Not very good	$\bar{X}$ SD	2.41 1.39	2.60 1.40	2.87 1.50	2.72 1.27
	Overall F=2.74, p=.04 (3,1144 df) Equality of Variances, F(NS) Scheffé contrasts, race effect F(NS) Scheffé contrasts, sex effect F(NS) Scheffé contrasts, white male effect F=6.58, p=.01 Scheffé contrasts, white men higher expectancies than white women, p=.05; black men, p=.02, and black women, p=.06				
Ability based job expectancy Compared to most other people doing your (that) kind of work, how much ability do you think you have? Range 1-4					
1 = Much more; 4 = A little less	$\bar{X}$ SD	2.32 .78	2.49 .78	2.38 .80	2.57 .68
	Overall F=3.21, p=.02 (3,1144 df) Equality of Variances, F(NS) Scheffé contrasts, race effect F(NS) Scheffé contrasts, sex effect F(NS) Scheffé contrasts, white male effect F=6.9, p=.008 Scheffé contrasts, white men more self confident than white women, p=.01 and black women, p=.03				
Sense of personal efficacy Range 0-6		(850)	(542)	(79)	(100)
0 = Low; 6 = High	$\bar{X}$ SD	1.52 1.39	1.77 1.52	2.43 1.78	2.65 1.52
	Overall F=24.77, p=.01 (3,1568 df) Equality of Variances, F=4.60, p=.003 Scheffé contrasts, race effect F=57.6, p=.001 Scheffé contrasts, sex effect F=3.84, p=.05 Scheffé contrasts, white male effect F=69.1, p=.001 Scheffé contrasts, white men greater than white women, p=.002; black men, p=.01; and black women, p=.001 Scheffé contrasts, white women greater than black men, p=.05 and black women, p=.0001				

male expectancy edge. Although white men work in jobs with the highest pay within every occupational category, the white men in this sample nonetheless felt more self-confident about their performance abilities and about being able to find another equally good job. The other three groups of workers were thus less optimistic about finding jobs that already provided lower pay than those of white men. Black and white women were less confident of their performance abilities for already lower paying jobs. Expectancies of being able to get into more preferred jobs or of being promoted or of being able to achieve desired goals should show an even stronger white male advantage.

The much larger sex and race differences on the measure of generalized sense of personal efficacy support this point. The personal efficacy index was comprised of four items in which respondents were asked whether they usually get to carry out plans the way they expected, feel pretty sure life would work out the way they wanted it to, feel they can run their lives pretty much the way they wanted to, and think it is better to plan life a good way ahead. None of the items thus refers specifically to jobs; three of the four ask directly about effectiveness or competence in managing things or achieving what respondnets had wanted. Whites, both men and women, had significantly higher personal efficacy scores than blacks, both men and women. In addition, white men felt higher efficacy than white women. The overall contrast of white men to all other workers was highly significant (see Table 7 for the Scheffé comparisons).

Expectancies and Other Aspects of Motivation

The race and sex results thus far have shown that there were only small differences in whether workers had ever tried to improve their market position, somewhat larger differences in job-specific expectancies, and much larger differences in the generalized sense of personal efficacy, causal attributions for market difficulties, and perception of obstacles in the market. In comparison to all other groups, white men reported the fewest obstacles and least often attributed them to their own educational limitations or to family obligations; they also expressed the highest sense of personal efficacy and job-specific expectancies. More women, but particularly black women, reported having tried educational changes, while fewer women, particularly black women said they had tried work changes. More women also attributed their market difficulties to family obligations. Both groups of whites expressed a stronger sense of personal efficacy than either black men or women; they also less often than black workers attributed their market difficulties to constraints or lack of opportunity in the market.

These results provide substantial support for the idea that expectancies and market experiences weigh heavily in the work motivation of women and minorities. They do not speak directly, however, to the issue of the relative importance of expectancies and other aspects of motivation, particularly the early socialized motives and values presumably relevant to achievement. Although we did not emphasize motive or achievement value measures in the national election study, two sets of analyses that we carried out of internal control and sense of personal efficacy speak to the significance of

Table 8

Ideological and Personal Components of Internal-External Control by Sex and Race, Covarying Education

	White Men (850)	White Women (542)	Black Men (79)	Black Women (100)
Six item control ideology factor Internal alternatives refer to Protestant Ethic virtues; external alternatives refer to fate, chance (0=internal; 6=external)	2.49	2.79	2.53	2.46
	White men more internal than white women, No other comparisons significant			p = .002
Two item success mobility ideology factor Internal alternative refers to Protestant Ethic explanations for getting ahead on the job; external alternatives refer to fate or being in the right place at the right time (0=internal; 2=external)	0.57	0.50	0.70	0.60
	No Scheffè comparisons significant			
Five item sense of personal control Internal alternatives refer to "I" or "my" control over life events; external alternatives refer to "I can't" or "fate does" control life events (0=internal; 5=external)	1.61	1.81	2.53	2.26
	White men more internal than white women, White men more internal than black men, White men more internal than black women, White women more internal than black men, White women more internal than black women,			p= .01 p= .0001 p= .0001 p= .0008 p= .005
Twenty[1] item total Internal External Control Scale (0=internal; 20=external)	7.96	8.36	10.04	9.60
	White men more internal than white women, White men more internal than black men, White men more internal than black women, White women more internal than black men, White women more internal than black women,			p = .06 p = .0004 p = .0002 p = .004 p = .004

Three of the original 23 Rotter Internal-External Control items were not asked in the national study because they referred to classroom situations that did not seem to apply to an adult sample. Two items on the Control Ideology Factor came from items traditionally used at the Institute for Social Research instead of from the Rotter I-E items. This means that 18 of the twenty items represented on the five factors presented above were from the Rotter items and are included in the total I-E Control scores.

personal expectancies and values. One analysis of responses to different factors of the Internal-External Control Scale shows that blacks (both men and women) differed from whites (both men and women although particularly from white men) in their own sense of internal control but not in their values or ideology about control. The four race and sex groups held very similar views about what should provide success in American society. This is seen in their scores to two factors that were generated by analyzing the individual items comprising the Internal-External Control Scale. One, General Control Ideology, asks respondents to explain whypeople succeed or fail in life. The other, Success Mobility Ideology, asks specifically for explanations for success in the job market. All four groups attributed success more to internal Protestant Ethic virtues than to external forces. By contrast, the factor that refers most clearly to respondents' personal expectancies, the Sense of Personal Control, showed definite race and sex differences. The questions comprising this factor asked resondents to tell whether they can control what happens in their own lives or whether external forces control their personal outcomes. White men expressed a higher sense of personal control than all other groups (see Table 8). White women, while less efficacious than white men, felt more personal control than either black women or black men. Thus, while black women (and men) adhere to much the same work ethic values, their expectancies about being able to control their own lives were less optimistic.

The pattern of responses to the individual items in the personal efficacy index previously reported also shows that it was only on the three questions that asked whether respondents felt they could make things work out that black women (and black men) felt less efficacious (see Table 9). There were no race or sex differences on the one question that was cast normatively as a value: "Do you think it is better to plan your life a good way ahead or would you think life is too much a matter of luck to plan ahead very far?" Black women and men valued planning ahead as much as white men. They also valued the work-ethic virtues referred to in the Internal-External Control scale as much. Their expectancies of being able to realize those values in their own lives were just lower.

The significance of this distinction between values and personal expectancies is also supported from data provided by a much larger national sample of black and white men and women heads of households collected by Morgan and his associates at the Survey Research Center.[27] Measures of achievement values and personal expectancies were not drawn from the Internal-External Control Scale but they illustrate the signifiance of expectancies. Seven questions factored together to comprise an index of ambition; five factored together to comprise an index of personal efficacy. Item analysis of the ambition questions showed no race differences on four questions. On two items -- preference for a job with chances of making more money even if the respondent disliked the job, and, spending time figuring out how to get more money -- black heads of households (both men and women) showed greater ambition

Table 9

Sense of Personal Efficacy by Sex and Race Covarying Education

(1972 National Election Study, Survey Research Center)

Item Responses (Range 1-5, 1 = efficacy)	White Men (850)	White Women (542)	Black Men (79)	Black Women (100)
Do you think it's better to plan your life a good way ahead, or would you say life is too much a matter of luck to plan ahead very far?	2.06	2.26	2.31	2.34
	No Scheffè comparisons significant			
When you do make plans ahead, do you usually get to carry things out the way you expected or do things usually come up to make you change your plans?	3.00	2.86	3.42	3.37
	White men feel more efficacious than black men, p = .08 White men feel more efficacious than black women, p = .07 White women feel more efficacious than black men, p = .03 White women feel more efficacious than black women, p = .01			
Have you usually felt pretty sure your life would work out the way you want it to, or have there been times when you haven't been sure about it?	3.28	3.40	4.08	4.14
	White men feel more efficacious than black men, p = .002 White men feel more efficacious than black women, p = .0001 White women feel more efficacious than black men, p = .01 White women feel more efficacious than black women, p = .0003			
Some people feel they can run their lives pretty much the way they want to; others feel the problems of life are too big for them. Which one are you like?	1.69	1.97	2.62	2.60
	White men feel more efficacious than white women, p = .0001 White men feel more efficacious than black men, p = .0001 White men feel more efficacious than black women, p = .0001 White women feel more efficacious than black men, p = .002 White women feel more efficacious than black women, p = .0002			

Table 10

Ambition and Personal Efficacy, by Sex and Race
(1972 Study of Income Dynamics, Survey Research Center)

<table>
<tr><th></th><th colspan="4">Heads of Households</th></tr>
<tr><th></th><th>White Men
(2460)</th><th>White Women
(1013)</th><th>Black Men
(672)</th><th>Black Women
(736)</th></tr>
<tr><td>Ambition index
(Range 0-9; 9 = high)</td><td>2.91</td><td>2.71</td><td>3.14</td><td>3.14</td></tr>
<tr><td></td><td colspan="4">White men higher ambition scores than white women, p = .006
Black men higher ambition scores than white men, p = .0002
Black men higher ambition scores than white women, p = .0001
Black women higher ambition scores than white men, p = .0009
Black women higher ambition scores than white women, p = .0001</td></tr>
<tr><td>Personal efficacy index
(Range 0-7, 7 = high)</td><td>3.38</td><td>2.72</td><td>2.86</td><td>2.22</td></tr>
<tr><td></td><td colspan="4">White men feel greater efficacy than white women, p = .0001
White men feel greater efficacy than black men, p = .0001
White men feel greater efficacy than black women, p = .0001
White women feel greater efficacy than black women, p = .0001
Black men feel greater efficacy than black women, p = .0001</td></tr>
</table>

than white heads of households. Only on one item -- attitude toward quitting a job that was not challenging enough -- did white heads (both men and women) show greater ambition. On the summary index blacks showed greater ambition (see Table 10). By contrast, whites expressed a higher sense of efficacy on all five questions comprising the personal efficacy index. White men particularly expressed higher efficacy and black women felt significantly less efficacious than all other groups. Thus, we see that black women, despite as high or higher ambition (particularly as reflected by the importance of financial incentives), did not feel as efficacious as any other group of household heads about being able to realize their ambitions in their own lives.

Current Occupational Status and Market Behaviors

Current market position and job search behaviors provide the final stage variables for our model of expectancy effects. Unfortunately, we did not ask as many questions as we should have to develop multiple criteria of current market position or to detail current, rather than past, efforts to improve one's position in the market. Moreover, the national election study asks only about family income rather than separately for the income earned by the respondent or for the respondent's current wage rate. We had to depend, therefore, on just two current market variables for employed respondents. One is the Duncan SES score for the respondent's current job; the other derives from a probe asked of people interested in shifting jobs about whether they have been doing anything in particular about it. The former suffers

Table 11

Current Job Status and Market Behavior, by Sex and Race

		White Men	White Women	Black Men	Black Women
		(791)	(466)	(76)	(85)
Respondent's current or former occupation coded according to the Duncan Decile					
	$\bar{X}$	6.01	5.99	4.16	4.11
	SD	2.57	2.59	2.66	3.13
	Overall F=24.26, p=.0001 (3,1414 df) Equality variances, F(NS) Scheffè contrasts, race effect F=71.6, p=.0001 Scheffè contrasts, sex effect F(NS)				
Current market behavior of respondents interested in a job change "Have you been doing anything in particular about if (Finding a new job?"					
1 = Yes; 5 = No	$\bar{X}$ SD	2.55 1.95	3.13 2.00	4.60 1.26	3.52 1.98
	Overall F=4.87, p=.002, (3,224 df) Equality variances, F(NS) Scheffè contrasts, race effect F=9.00, p=.003 Scheffè contrasts, sex effect F(NS) Scheffè contrasts, white male effect F=14.3, p=.0002 Scheffè contrasts, white men more active than white women, p=.04; black men, p=.001; and black women, p=.03				

because it is not sensitive to sex differences, despite the fact that women and men do differ in a more differentiated job code, in industry sites, and in wages. The second is limited by depending on interest in job shift rather than assessing some form of curent market activity of all workers. This has particularly serious consequences for the black sample since the number, small initially, is reduced to a very small group when interest in job shift is controlled.

Our results support previous literature that shows that women and men do not differ on the Duncan SES measure. However, whites were in jobs with considerably higher status scores than blacks (see Table 11).

The significant race effect in current job search behavior noted in Table 11 is accounted for by the greater activity of white men. White men were more active than all other groups of workers interested in a job shift in actually trying to find a new job. The number of blacks is so small that we would not want to make much of the race results. White men also stood out from white women and it is that difference that will be addressed in a causal model of job search activity among whites in Chapter V.

CHAPTER IV

INTERRELATIONSHIPS OF MARKET EXPERIENCES, CAUSAL ATTRIBUTIONS, AND CURRENT EXPECTANCIES

This chapter examines the interrelationships of the four groups of workers' past experiences, causal attributions for the outcomes of their experiences, and current expectancies. Since the questions about market change efforts were phrased to respondents in the past tense (Was there ever a time when you tried . . .), while the expectancy questions referred either to present feelings or to estimates about the future, the relationships between the two should imply something about temporal causation. Since the causal attribution measures were coded from probes to questions cast in the past tense, they are treated as reflecting a past period and having the same position in a causal chain as the questions about previous change efforts. We, therefore, discuss the intercorrelations presented in this chapter in two ways: the interrelationships of change efforts and causal attributions at a previous time in the respondents' lives without implying directionality, and, the relationships of both these sets of variables to current expectancies and present feelings of efficacy with causal implications. We also carry out regression analyses only with the expectancy measures treated as dependent variables. We would, of course, have much preferred longitudinal information in which the chain depicted here could be tested without assuming temporal differences from the phraseology of questions. The results should therefore be viewed primarily as suggestive for future research.

The interrelationships among the experience, causal attribution, and expectancy measures are presented separately for the four race and sex groups in Tables 12 through 15. We wanted to explore whether the patterning of market experiences and causal attributions would vary depending on the race and sex of the worker. We also suspected that the current expectancies of both groups of women and of black men would show stronger experience effects while the expectancies of white men would depend less on their previous experiences in the market. This should be true if white men are actually aware of their market advantage and the likelihood that they will be relatively successful compared to other groups, even if they experience some difficulties along the way. Other workers may be more discouraged by negative experiences. (The table that presents all the tests of differences between the correlations for the four groups of workers is appended at the end of this report. We discuss differences in correlations in the text only when they are statistically significant.)

Previous Change Efforts

We have already seen that black and white men and women differed primarily in what changes they had tried, not in whether they had tried something to improve their market position. Women, particularly black women, tried educational changes more and work changes less than men.

Table 12

Interrelationships of Past Market Experiences and Current Expectancies: White Men (N = 812)

Years of schooling attained	1.00														
Tried a market change	.20***	1.00													
Tried job change	-.08	-	1.00												
Tried education change	.08	-	-.63***	1.00											
Held back in life	-.18***	-.03	-.07*	.03	1.00										
Held back on job by educational limitations	-.12***	.12***	-.08*	.06	.18***	1.00									
High mention of market constraints	-.02	.02	-.07*	.01	.30***	-.04	1.00								
High mention of educational deficiencies	-.14***	-.01	-.01	-.04	.35***	.30***	.06	1.00							
High mention of family obligations	-.09**	.02	.08*	-.06	.20***	.01	-.04	.02	1.00						
High mention of financial difficulties	.01	-.06	.13***	-.16***	.14***	.08*	-.07*	.09**	.23***	1.00					
System blame ideology regarding race inequities	.15***	.00	-.07*	.08*	-.05	-.03	.00	-.03	-.06	.14***	1.00				
System blame ideology regarding sex inequities	.27***	.17***	-.01	.04	.00	-.03	.01	-.07*	-.03	.09**	.43***	1.00			
High employment expectancy	.05	.06	-.01	.03	-.04	-.07*	-.33***	-.19***	-.03	.04	-.03	.01	1.00		
High job performance expectancy	.20***	.06	.03	.02	.04	-.03	.00	.02	-.11**	-.06	.03	.01	.12***	1.00	
High personal efficacy	.23***	.01	.05	.00	-.21***	-.05	-.09**	-.12***	-.06	-.02	-.01	.02	.13***	.10**	1.00

*p = .05
**p = .01
***p = .001

Table 13

Interrelationships of Past Market Experiences and Current Expectancies: White Women (N = 536)

Years of schooling attained	1.00														
Tried a market change	.18***	1.00													
Tried job change	.07	-	1.00												
Tried education change	.09*	-	-.65***	1.00											
Held back in life	-.20***	.04	-.16***	.03	1.00										
Held back by educational limitations	-.12**	.04	-.23***	.11**	.30***	1.00									
High mention of market constraints	.01	-.08	-.06	-.09*	.15***	-.01	1.00								
High mention of educational deficiencies	-.24***	.07	-.14***	.00	.46***	.32***	.03	1.00							
High mention of family obligations	-.20***	.02	.22***	-.02	.23***	-.04	-.06	-.01	1.00						
High mention of financial difficulties	.13**	-.07	.04	.02	.04	-.08	.01	-.13**	-.33***	1.00					
System blame ideology regarding race inequities	.09*	.04	-.05	.05	-.01	.02	.06	-.02	-.01	-.06	1.00				
System blame ideology regarding sex inequities	.28***	.12**	-.02	.02	.07	.07	.08	.03	-.25***	-.06	.38***	1.00			
High employment expectancy	.06	.03	.09*	.01	-.02	-.07	-.28***	-.14***	-.03	-.08	-.04	-.05	1.00		
High job performance expectancy	.02	.07	.25***	-.13**	-.11**	-.03	.05	-.02	-.07	-.10*	.01	.19***	.12**	1.00	
High personal efficacy	.30***	.06	.09*	.03	-.22***	-.15***	-.09*	-.07	-.03	-.12**	.00	.09	.10*	.16**	1.00

*p = .05
**p = .01
***p = .001

Table 14

Interrelationships of Past Market Experiences and Current Expectancies: Black Men (N = 76)

Years of schooling attained	1.00															
Tried a market change	.35**	1.00														
Tried job change	.02	-	1.00													
Tried education change	-.05	-	-.48***	1.00												
Held back in life	-.23*	-.07	.35**	-.25*	1.00											
Held back by race/ nationality/religion	-.04	-.07	.12	.00	.15	1.00										
Held back by educational limitations	-.30**	.02	.19	-.06	.11	.08	1.00									
High mention of market constraints	.07	-.03	.03	-.13	.47***	.32**	.05	1.00								
High mention of educational deficiencies	-.18	-.04	.23*	.00	.23*	.25*	.33**	-.06	1.00							
High mention of family obligations	.05	.00	-.07	-.23*	-.03	.06	.13	-.14	.11	1.00						
High mention of financial difficulties	-.23*	-.11	.29*	-.29*	-.05	-.39***	.01	-.26*	-.11	.24*	1.00					
System blame ideology regarding race inequities	.01	-.06	.44***	.28*	.26*	.45***	.02	.28*	.16	.06	.21	1.00				
System blame ideology regarding sex inequities	.56***	-.14	.43***	-.08	.31**	.04	-.05	-.04	-.12	-.08	.04	.31**	1.00			
High employment expectancy	.20	.09	-.13	.23*	-.43***	-.23*	-.26*	-.37***	-.53***	-.05	-.13	-.13	-.07	1.00		
High job performance expectancy	.49***	.14	.01	.01	-.16	-.19	-.26*	-.19	-.30**	-.05	.20	.24*	.41***	.32**	1.00	
High personal efficacy	.00	.16	-.22*	.10	-.23*	-.19	-.19	-.12	-.17	-.07	.26*	-.07	.12	.10	.11	1.00

*p = .05
**p = .01
***p = .001

Table 15

Interrelationships of Past Market Experiences and Current Expectancies: Black Women (N = 100)

Years of schooling attained	1.00															
Tried a market change	.17	1.00														
Tried job change	.26**	-	1.00													
Tried education change	-.22*	-	-.23*	1.00												
Held back in life	-.04	-.06	-.03	-.18	1.00											
Held back by race/ nationality/religion	-.08	-.08	-.04	.08	.06	1.00										
Held back by educational limitations	-.44***	-.10	-.26**	.26**	.08	.03	1.00									
High mention of market constraints	.00	.00	-.15	-.03	.30**	.40***	.02	1.00								
High mention of educational deficiencies	-.15	-.12	-.12	.16	.14	.03	.31***	-.21*	1.00							
High mention of family obligations	-.31***	.03	.46***	-.10	.14	-.06	.08	-.31***	.02	1.00						
High mention of financial difficulties	-.28**	-.09	.04	-.10	.06	-.10	-.17	-.16	-.04	-.33***	1.00					
System blame ideology regarding race inequities	.13	-.07	.12	-.28**	.01	.21*	-.07	.33***	.10	-.35***	.05	1.00				
System blame ideology regarding sex inequities	.40***	.19*	.05	-.35***	.07	.03	-.10	.14	-.09	-.26**	.08	.27**	1.00			
High employment expectancy	.05	.12	.30**	.06	-.08	-.07	-.11	-.47***	-.11	.00	-.25**	-.27**	-.12	1.00		
High job performance expectancy	.03	-.08	.20*	-.31***	-.10	-.07	-.08	-.05	-.02	.17	.04	.24*	.27**	.04	1.00	
High personal efficacy	.26**	.20*	.27**	.06	-.19*	-.06	-.17	-.12	-.05	-.08	.06	.14	.20*	.24*	.10	1.00

*p = .05
**p = .01
***p = .001

The intercorrelations of these previous change efforts with attributions about the causes of their market experiences also depend on the race and sex status of respondents. Black men particularly stood out from other workers because their previous efforts to improve their market position were associated with more difficulties. If black men had tried to make job changes or seek on the job training, they also reported several negative experiences. Trying a job change was associated with feeling held back in life (+.35) and with more frequent mention of educational deficiencies (+.23) and financial problems (+.29) as reasons for market difficulties. Black men who had tried educational changes did not express these reactions. In fact, trying an educational change was negatively related to feeling held back (-.25) and with less frequent mention of financial difficulties (-.29) and family obligations (-.23) as sources of market problems. Since work and educational efforts were generally alternatives to each other (not only for black men but all three other groups as well), these nearly opposite relationships would naturally be expected. The important result is that among black men work, rather than educational, investment is associated with negative experiences as well as with a lower sense of personal efficacy and somewhat lower expectancies of being able to get another job at least as good as their present one. White men who had tried job changes did not report this pattern of negative experiences nor were their current expectancies and sense of efficacy tied to their previous change efforts.

Relationships among these variables were fairly similar for black and white women, although different from both groups of men.

Let us look first at black women since their correlations are larger. The more highly educated black women more often had tried something to improve their situation; they also reported having tried work changes more often. Having tried a work change was moreover associated with not feeling restricted by their own educational limitations (-.26), with a strong stress on family obligations (+.46) as deterrents to their previous market success, and with higher current job expectancies (+.30), higher performance confidence (+.20), and stronger sense of personal efficacy (+ .27). Job-related changes were thus not only rare among black women but were the responses of better educated women who felt held back by their family obligations, rather than by their own educational qualifications. This same pattern characterizes the relationships for white women as well, although educational attainment was not a significant correlate of work changes for them. Otherwise, the white women, like the black women, who reported having tried to make job changes did not feel restricted by their educational qualifications, did stress family obligations, and were more self confident about their job performance abilities. By contrast, women who had tried educational changes did stress their own educational deficiencies and also expressed lower performance confidence; among blacks they were also the least educated.

We have thus seen that white and black men tried work changes more often than women; that objective education did not distinguish which men of either group had done so; that the investment in work changes was not associated with either positive or negative experiences or with current expectancies for white men but tied to heightened feelings of their own educational deficiencies, financial problems, and somewhat lower job expectancies and sense of efficacy among black men. Having tried work changes was associated with less stress on their own educational limitations and with higher expectancies among both groups of women. The one constraint that such women mentioned more than other women was the sense that their family obligations had held them back.

Perception of Obstacles and Causal Attributions

Blacks more than whites, and white women somewhat more than white men, said they had been held back in life. This general sense of restriction is expressed more frequently by the least educated of all groups except black women for whom education was simply irrelevant to feeling held back. Given these educational effects, it is not surprising that feeling held back was also associated for all groups but black women, with attributing market problems to their own educational limitations. Both the structured question on the extent to which they had been limited in job success by their education and the summary attribution to educational deficiencies coded from open-ended questions were significantly associated with general feelings of being held back. In addition, feeling held back was associated for all groups (although significantly less strongly for white women) with stressing market obstacles (lack of jobs, discrimination, etc.) as reasons for previous market difficulties.

One striking distinction between the groups is the broader generalization of feelings of being held back to more causes among whites than among blacks. Feeling held back was associated among whites not only with stressing their own educational deficiencies and market obstacles but also with a strong stress on family obligations and, among white men, with frequent mention of financial difficulties. By contrast, the sense of being restricted in life was attributed more exclusively just to educational deficiencies and to market constraints among black men and nearly uniquely to market constraints among black women.

The interrelationships of the causal attributions show that market obstacles and educational issues form two distinct clusters for all groups. Frequent mention of market constraints was independent of educational attainment and of stressing educational deficiencies among all groups, and independent of all other attributions as well among whites. The discrimination theme in the market constraint attribution is also reflected in its positive correlations for blacks with feeling that race had specifically held them back in getting a good job (.30 for black women, .32 for black men). The distinctiveness of market constraint attributions is further demonstrated by negative correlations for black workers with financial difficulties and family obligations as reasons offered for market difficulties.

The other distinct cluster involved the signifiance of education and was common for all groups. The least educated more frequently said that their educations had specifically limited their job success and they also stressed educational deficiencies as reasons given in open-ended questions. Both measures of educational attributions were also positively related to each other and nearly independent of all other attributions among all four groups.

Family obligations were mentioned much more frequently by both groups of women than by either group of men. Stressing family obligations also carried different meaning for women and men. Men who stressed family obligations also stressed financial difficulties; white men who stressed both of these also felt held back in life. This focus on family obligations was just as frequent among the better and less well educated men. By contrast, women who stressed family obligations were the least educated. Moreover, frequent mention of family obligations was negatively related to stress on financial difficulties among women and was also negatively related to market constraint attributions among black women. Thus, family obligations seem to be reasons offered by less well educated women who do not focus on external constraints that require greater awareness of how the market operates. This interpretation is further supported by the fact that such women also blame other women instead of systemic forces for sex differences in market status; black women who stress family obligations likewise blame other blacks instead of race discrimination for race inequities in market status.

Generally, these results show considerable similarity in the attributions of the four groups of workers. All four groups show the two separate clusters of attributions, one that is strongly related to education and results in stressing personal educational deficiencies;

the other that is independent of education and represents awareness of market constraints. Both of these sets of attributions are correlated with the general feeling of being held back for all groups but black women; feeling held back in life among black women is primarily related to the sense that market constraints have influenced what happened to them. Group differences are most striking regarding the meaning of family obligations as an attribution for market difficulties and in the greater generalization of feelings of restriction to more causes among whites than among blacks.

To what extent have the personal attributions reflected in these measures generalized to a system blame ideology for race and sex differences in wages and other market attainments? Do workers who stress market constraints in their own lives also express a general system blame ideology? The answer depends on the race of the worker. The personal market experiences of white workers were almost entirely irrelevant to their beliefs about the causes of market differentials by sex and race. It is true that the more educated white workers more often blamed systemic forces for race differences and even more clearly for sex differences. But apart from this significant effect of educational attainment, few other market characteristics or experiences correlated with either system blame measure for whites. The two exceptions show that white men who say they have experienced financial difficulties were more aware of the impact of race discrimination on black workers. And both white men and women who have tried to improve their own market situation more frequently stressed systemic causes for sex differentials. The one personal experience that correlated with blaming individuals rather than systemic forces was the stress among white women that their own problems stemmed from their family obligations. Otherwise, the few significant correlations for whites reflected greater awareness of discrimination in the lives of other people among the more highly educated and those who had previously tried to alter their own market situation.

Many more correlations were significant for black workers. Their ideologies about the causes of race inequities particularly reflected their own personal experiences and explanations for what had happened to them. Black men who had previously tried job changes and who felt they had been held back in life more often blamed race discrimination for race differences in market status; both men and women who specifically felt they had been held back by race discrimination and who stressed market constraints in their own lives also blamed race discrimination as the cause of the market problems of black people in general. The interrelated set of education and educational attributions was, by contrast, not related to the race system blame ideology of black workers. Less well educated black workers who were more likely to attribute their own problems of personal educational deficiencies were no more likely than the more highly educated to stress systemic explanations for race differences in the market. Thus, we see clear evidence of a generalized focus on race discrimination in both their ideologies about inequities and causal attributions for what has happened to them but no evidence that other negative personal experiences and attributions play a part in the system blame ideologies of black workers. It is a differentiated focus on race discrimination that ties their personal experiences to their broader beliefs about race inequities. Their beliefs about sex inequities, however, follow the pattern of whites in which high educational attainment is the most striking correlate of a system blame ideology. The most highly educated black workers, like the most highly educated white workers, held sex discrimination responsible for the cause of sex differentials in the market. In addition, men who had tried work changes and felt generally held back in life also blamed sex discrimination rather than the personal deficiencies of women; women who had tried something to improve their own situations and had not tried educational changes nor attributed their own difficulties to family obligations also did so. Otherwise, their own personal experiences, particularly their race-related experiences -- whether they specifically attributed their own job problems to race discrimination and whether they stressed market constraints as a cause of their market difficulties -- were simply unrelated to their ideologies about the causes of sex incquities. This was as true of black women as black men. Black women thought about their own personal experiences and the general market problems of black people in much the same way; they did not tie their own personal experiences to the general market problems of women. Their pattern was almost exactly the same as the pattern of black men.

One other difference in the correlations of the system blame ideology measures for black and white workers should be noted.

The current expectancies of white workers were unrelated to their broader beliefs about inequities in the market, while those of black workers were significantly tied in a complex way to their ideologies. Black workers with the highest performance expectancies -- those who felt most self-confident about their own job abilities -- expressed the strongest blame of discrimination for both race and sex differentials in wages and job status. (This is not simply the effect of educational attainment because it was irrelevant to their system blame ideologies about race differentials and was not significantly related to the performance expectancies of black women.) Global employment expectancies, by contrast, were negatively, not positively, related to system blame ideology measures, significantly so for black women with the race system blame measure. This means that black workers who were particularly aware of discrimination as a cause of market differentials were less optimistic about their own chances of finding another job as good as their present job, despite also feeling more confident of their own job performance and abilities.

Market Experiences and Current Expectancies

The three expectancies that we measured vary in their level of generality. Personal efficacy was the most general because the items comprising it referred to life in general instead of to specific arenas of life. The overall employment expectancy measure was considerably less general in that it referred specifically to the job arena but still more general than the performance expectancy measure which focused on confidence about being able to perform well on the job.

The experience measures also vary in level of generality, from feelings of being held back generally in life to feelings of being held back on the job and for specific reasons. The strength of the relationships between expectancies and experiences also depend on the generality of the measures. The most global experience measure, the sense of being restricted generally in life, related better to the sense of personal efficacy than to the expectancy of being able to get an equally good job in the future. (This is not as true for black men since their general sense of restriction correlated with both their sense of personal efficacy and their overall employment expectancies.) By contrast, specific sources of negative experiences correlated better to the more specific job expectancies. Attribution of difficulties to market constraints, for example, correlated much better for all groups of workers to their probabilities of being able to get an equally good job in the future than to their feelings of personal efficacy. Table 16 highlights the correlations in Tables 12-15 that show the significance of the generality-specificty issue in the relationships between experiences and expectancies.

Let us look more closely at the correlates of the four groups of workers' current job expectancies. Previous experiences with market obstacles were not the only significant correlates of lower job expectancies. Workers who stressed their own educational deficiencies as reasons for previous market difficulties also expressed lower job expectancies. Thus, the two independent sets of attributions, one stressing obstacles in the market itself and one stressing educational

Table 16

Relationships of a General and Specific Experience
Measure with a General and Specific Expectancy

	Expectancy Measures							
	Sense of Personal Efficacy				Overall Job Expectancy			
Experience Measures	White Men	White Women	Black Men	Black Women	White Men	White Women	Black Men	Black Women
General feeling of being held back in life	-.21	-.22	-.23	-.19	-.04	-.02	-.43	-.08
Specific attribution of difficulties to market constraints	-.09	-.09	-.12	-.12	-.33	-.28	-.37	-.47

problems they had brought to the market, both correlated with current job expectancies. These were the two highest correlations for all but black women whose current job expectancies were influenced more exclusively just by having experienced market constraints. (The whole complex of educational attainment and attributions to educational deficiencies was just not as critical either for black women's general sense of being held back or for their current expectancies.) This pattern of total correlations suggested carrying out a multivariate analysis involving three predictors of overall job expectancies -- actual educational attainment, high stress on market constraints, and high stress on personal educational deficiencies. These three variables explained 29% of the variance in current job expectancies for white men, 26% for white women, 36% for black men, and 28% for black women (see Table 17). Having experienced market constraints was critical for all groups, although its effect was gerater among whites. White workers did not experienced market constraints as often as black workers but when they did, the impact on job expectancies was greater. Stress on educational deficiencies significantly affected the current expectancies of all but black women; its impact for black men was especially pronounced, over twice as large as its effect on white men or women and eight times larger than its effect on black women. Black men, therefore, not only stressed educational deficiencies more than any other group of workers but its negative effects on current job expectancies were also greater for them than for other workers.

The impact of these two separate sources of market difficulties on black men's current expectancies is supported by two additional

Table 17

Net Effects of Education and Two Causal Attributions (Market Obstacles and Educational Deficiencies) in Explaining Employment Expectancies

(Metric form regression coefficients, standard errors in parentheses)

	White Men	White Women	Black Men	Black Women
	(606)	(420)	(69)	(84)
Education	.027	.038	.091	.038
	(.149)	(.040)	(-.083)	(.083)
High stress on market constraints	-1.198***	-1.184***	-.418*	-.434***
	(.026)	(.102)	(.193)	(.109)
High stress on own educational deficiencies	-.482***	-.348**	-.859***	-.024
	(.083)	(.121)	(.197)	(.267)
R^2	.287	.258	.362	.228

*.05

**.01

***.001

multivariate analyses. The first tests the reliability of the results by examining the effects on overall employment expectancies of two types of measures of their attributions to personal educational deficiencies and to market constraints. It compares the effects of measures derived from the responses of black men to open-ended questions about their difficulties in the market with the measures from structured interview questions. Table 18* shows that the effects of the two distinct sets of causal attributions are highly reliable regardless of which type of measure was used. The proportion of the variance in current job expectancies that was explained by the two sets of causal attributions was approximately the same when measures from the unstructured and structured questions were used. The beta weights in both analyses also show that black men's stress on their own educational deficiencies was considerably more important than their stress on previous market constraints. Finally, both analyses show that reactions to their educations were far more important than their actual educational attainments. Personal reactions to their educations significantly influenced their current job expectancies even after adjusting for the fact that the least educated stressed their own educational limitations more. Their experiences apparently have encouraged them to emphasize educational limitations more than

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*The first set of results depicted in Table 18 is the same, although in standardized form, as those presented in metric form for black men in Table 17. Metric form makes it possible to compare across groups as was done in Table 17; standardized form makes it possible to assess the relative importance of different variables for one group.

Table 18

Comparison of Total Correlations and Net Effects of Education, Stress on Educational Deficiencies and Market Constraints on Black Men's Employment Expectancies (N = 69)

	Bivariate Regression Coefficients (Total Correlation)	Standardized Regression Coefficients from Multivariate Analysis
Analysis predicting employment expectancies from education and stress on market constraints and educational deficiencies coded from open-ended questions		
Education	.197	.126
High stress on market constraints	-.270*	-.242*
High stress on educational deficiencies	-.531***	-.498***
R^2		.362
Analysis predicting employment expectancies from education and structured questions on market constraints and educational deficiencies		
Education	.197	.074
Held back in life	-.435***	-.359**
Held back in market by educational limitations	-.261*	-.242*
Held back in market by race discrimination	-.214*	-.107
R^2		.307

*.05

**.01

***.001

other groups and more than their actual educational attainment would suggest it should.

One might be tempted to suggest from these results that black men have unrealistically overreacted to their educations in assessing their chances for employment. We think this is not the case. The same dynamic does not appear in the multivariate analysis of their performance expectancies (see Table 19). Educational attainment was far more important than their attributions about their educational limitations in accounting for their expectations about their job-related abilities. Those men who felt most self-confident about their performance on their jobs were those with the most years of schooling. Moreover, the significant impact on performance expectancies of their reactions to their educations was no longer significant when actual schooling was controlled. The net effects of their attributions about their educational deficiencies were much smaller than their total effects and far smaller than the direct effect of educational attainment. Moreover, the total effect of educational attainment (.492) on performance expectancies was composed primarily of its direct impact (.362) and much less of indirect effects through attributions about educational limitations and deficiencies (.130). Thus, when the expectancy measure asks specifically about performance, and not about employment chances, actual education is a powerful predictor of expectancy. When the expectancy measure focuses on chances for employment and thus of employers' reactions, actual attainment is not a powerful predictor, while attributions about educational deficiencies are. The message black men seem to have learned from their market experiences is that

Table 19

Comparison of Simple Correlations and Net Effects of Education and Stress on Educational Deficiencies in Explaining Black Men's Job Performance Expectancies

	Bivariate Regression Coefficient (Simple Correlation)	Standardized Regression Coefficients from Multivariate Analyses
Education	.492***	.362**
High stress on educational deficiencies (open-ended)	-.298**	-.159
Held back in market by educational limitations (structured questions)	-.256*	-.134
R^2		.233

*.05
**.01
***.001

employers have considered their educational qualifications an obstacle to their employment, and their current employment expectancies reflect this message. Fortunately, this market experience has not seriously affected their assessments of their own performance job abilities. Is this because they have also learned that discrimination heavily influences what happens to blacks and women in the labor market? Some support for this is suggested by the significant correlations between high performance expectancies and the expression of a system blame rather than individual blame ideology about market inequities. The performance expectancies of black men with a strong system blame ideology for race and sex inequities were much higher than for those who blamed blacks and women themselves. These relationships are not entirely explained by educational attainment itself since years of schooling did not influence the system blame ideology about race inequities and because the net effect of the sex system blame ideology measure (.241) remains significant even after adjusting for the fact that the better educated black men more often held sex discrimination responsible for women's market problems.

What explains the performance expectancies of the other groups of workers? The results showed far greater similarity across groups in explaining their overall employment expectancies than in accounting for their judgments of their performance on their jobs. Tables 12-15 showing the total correlation results indicate that actual educational attainment was a significant correlate of performance expectancies not only for black men but for white men as well. However, the effects of specifically work-related experience is further buttressed by the significant correlations for both groups of women between high performance expectancies and attributing women's market problems to sex discrimination rather than to women's personal deficiencies (and for black women between high performance expectancies and attributing blacks' status to race discrimination). The women with greatest performance self-confidence have had greater job search experience; they also seem to have learned that discrimination has been a reality in determining the wages and occupational status of women and blacks. Have they thus learned not to blame themselves and to use their experience to trust their own performance abilities?

We are clearly arguing a causal chain that treats job changes vs. educational investments as the determinant of women's current performance expectancies. With these cross-sectional data we cannot be sure of this direction of effects, even with the differences in time that were implied in the working of the experience and expectancy questions. Future research very much needs to tease out the direction of these effects because the chain we have argued suggests that women's feelings of confidence about their job performance would be increased more by gaining additional experience in the job search and by being helped to make job changes than by depending entirely on education as the primary route to market improvement.

This same pattern also describes the correlations of black women's sense of personal efficacy, although actual education also significantly influenced these feelings of efficacy. The best educated black women, those who more often tried job changes, who felt less held back in life, and those who attributed women's market problems to sex discrimination felt most personally efficacious. The net effects of job experience and of a system blame ideology, however, were less impressive in accounting for the personal efficacy of black women than in accounting for their performance expectancies since actual educational attainment influenced all these variables. Thus, the net effects of job experience and a system blame ideology were considerably smaller after adjusting for years of schooling. For white women personal efficacy was determined primarily by actual educational attainment; even the total effects of their job experiences were far smaller than in accounting for their performance expectancies.

Actual schooling was in fact the most important predictor of sense of efficacy for all groups but black men. All the other correlates of efficacy for white men and women and for black women were themselves influenced by schooling. Their direct effects were thus considerably less impressive than either their total effects or the direct effect of education. Black men's sense of efficacy, by contrast, was simply not correlated with educational attainment. Instead, a high sense of personal efficacy was correlated for black men with much the same variables that influenced their performance expectancies and their overall employment expectancies. Although the correlations shown in Table 14 for personal efficacy were far smaller than for the other two expectancies, they show the negative impact of previous experience as attributed to the two separate clusters of problems, to market educated black women, those who more often tried job changes, who felt less held back in life, and those who attributed women's market problems to sex discrimination felt most personally efficacious. The net effects of job experience and of a system blame ideology, however, were less impressive in accounting for the personal efficacy of black women than in accounting for their performance expectancies since actual educational attainment influenced all these variables. Thus, the net effects of job experience and a system blame ideology were considerably smaller after adjusting for years of schooling. For white women personal efficacy was determined primarily by actual educational attainment; even the total effects of their job experiences were far smaller than in accounting for their performance expectancies.

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The causal attributions offered for their experiences in the market formed two distinct clusters for all four groups. One cluster focussed on their own educational limitations that they brought to the market; the other, clearly independent of both years of schooling and stress on educational deficiencies, emphasized constraints in the market itself. Both sets of attributions were associated with general feelings of being held back in life and with lower expectancies about being able to find a job at least as good as their present ones, at least for all groups but black women. The whole issue of educational deficiencies was less critical to the experiences and expectancies of black women.

The effects of educational attainment and of their reactions to their educational qualifications were more critical for black men than for any other group. Black men not only emphasized their own personal educational deficiencies as reasons for previous market difficulties more than other workers, but these reactions also influenced their current expectancies more. The expectancy effects of actual schooling and reactions to their education depended, however, on whether job expectancies asked about future employment possibilities or about performance confidence. Expectancies about being able to get a job as good as their present ones were influenced greatly by their reactions to their educational qualifications and not by their years of schooling. Moreover, stress on their own educational deficiencies was the most important predictor of their employment expectancies. Their job performance expectancies, by contrast, were powerfully influenced by their actual educational attainment and only minimally by their stress on their own educational limitations. Market experiences therefore seem to have taught black men that employers treat their educational qualifications as a market limitation.

Sex differences were especially pronounced in the results on performance expectancies. Compared to men, both groups of women were less self-confident about their job-related abilities. In addition, their judgments of their job performance abilities did not reflect years of schooling, as the judgments men made did. Instead, the performance expectancies of both groups of women were influenced most by a specific type of market experience -- attempting job-related changes and not depending on acquiring additional education as a way to improve their market positions. Women did not as often as men try to change jobs or make other work changes. But those who did were more self-confident of their performance abilities. Women more often than men tried to improve their situations by returning for more education. Those who did held significantly lower performance expectancies. Actual schooling was irrelevant for their performance confidence; efforts to acquire more schooling negatively influenced it. Just the opposite is true for men. Schooling increased their performance confidence; neither job nor educational changes affected it.

Black workers were far more aware than white workers of the systemic causes of market differentials. They more often attributed race and sex inequities in wages and occupational status to market discrimination. Whites, by contrast, more often offered individualistic theories which stressed personal deficiencies rather than market factors. White men and women both blamed individual blacks for their market difficulties more than black workers did. White men particularly stood out in stressing individual explanations for sex differentials. The relationships between their own market experiences and their ideologies about the causes of market differentials also showed strong influences of race. The personal market experiences of white workers were almost entirely irrelevant to their beliefs about the causes of sex and race market differentials. The one exception is that the more educated white workers more often blamed systemic forces for race differences and even more clearly for sex differences. Otherwise, neither the efforts white workers had made to alter their market positions nor their explanations for their own experiences seemed to influence their beliefs about market inequities. By contrast, black workers' beliefs about the causes of race differentials in wages and occupational status very much reflected their own personal experiences. Black men who had previously tried job changes and who felt they had been held back in life more often blamed race discrimination for race inequities in the market. Both black men and black women who felt they had been held back by race discrimination and who stressed market constraints in their own lives also blamed race discrimination as the cause of market problems of black people in general. Education was, by contrast, not related to black workers' ideologies about race inequities. Less well educated black workers were no more or less likely than better educated workers to stress systemic explanations for race differences in the market. Education did facilitate black workers' understanding of market and institutional determinants of sex inequities but personal experience with discrimination, itself independent of education, proved to be the critical correlate of their explanations for race inequities.

The expectancy effects of blaming the system rather than individuals themselves for race and sex differentials in the market depended on which job expectancy was assessed. The future employment expectancies of black workers were lower among those who held race discrimination responsible for race differentials in the market. But the performance expectancies of black workers with a strong system blame ideology were higher, not lower, than those who focussed on personal deficiencies instead of race discrimination. This is not explainable by years of schooling since educational attainment was not related to black workers' ideologies about market inequities. Instead, it seems to be a genuine effect of preserving a positive view of one's own performance abilities, despite a realistically lower expectation of finding employment, among black workers who are unusually aware of race discrimination in the labor market. The same phenomenon is also revealed by results showing higher, not lower, performance expectancies among both groups of women with stronger system blame ideologies about sex inequities in the market. Again, educational attainment cannot explain these results, in this case because educational attainment was not related to women's performance expectancies. White men were the only group whose performance expectancies were unrelated to their ideologies about market differentials. They are the only group who have not needed to understand the role of discrimination in order to preserve their own sense of confidence in their job abilities.

CHAPTER V

EDUCATION, MARKET EXPERIENCES, AND EXPECTANCY EFFECTS ON CURRENT MARKET BEHAVIORS

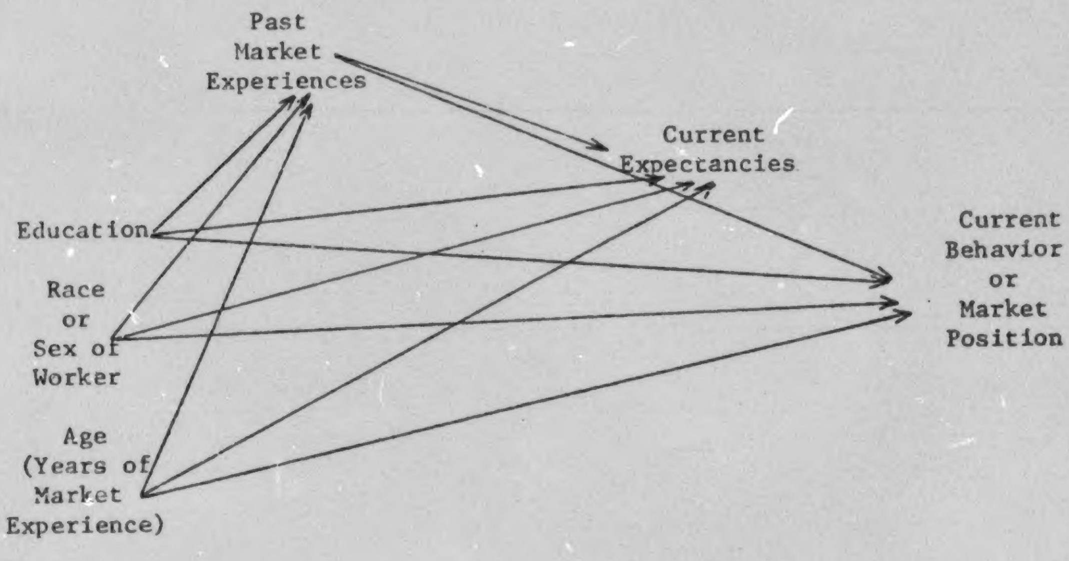
This chapter presents a general causal model in which expectancies are viewed as intervening variables influencing three current market outcomes or behaviors: 1) the status of the jobs held by black and white workers, 2) the job search behavior of currently employed white men and women who were interested in changing jobs, and 3) the future work intentions of white housewives who were employed, if at all, less than half time the previous year.

The basic model which will be examined is displayed in Figure 1. Current market behavior is taken to be the result of three sets of influences: 1) the worker's characteristics originally brought to the market, 2) the worker's subsequent market experiences and attributions about the causes of those experiences, and 3) current expectancies. We focus on four worker characteristics that previous empirical work has indicated are strongly related either to occupational position or to wages -- years of schooling, race and sex of worker, and age as a proxy for years of work experience. These four characteristics have both a direct effect on current market behavior in this model, and an indirect effect through the intervening variables of market experiences at stage two and current expectancies at stage three. The experiences workers have after entering the market also have both a

Figure 1

Schematic Diagram of Four Stage Model of Current Market Behavior

Stage 1	Stage 2	Stage 3	Stage 4


Past
Market
Experiences
Current
Expectancies
Education
Race
or
Sex of
Worker
Age
(Years of
Market
Experience)
Current
Behavior
or
Market
Position

direct effect on current market behavior (net after controlling for original supply characteristics and expectancies) and an indirect effect through current expectancies at stage three. Expectancies are viewed as directly influencing current behavior.

The relationships depicted in Figure 1 are represented by the following three equations:

$$\text{Market Experiences} = \beta_1\text{Education} + \beta_2\text{Race} + \beta_3\text{Sex} + \beta_4\text{Age} + U_1$$

$$\text{Current Expectancies} = \beta_5\text{Market Experiences} + \beta_6\text{Education} + \beta_7\text{Race} + \beta_8\text{Sex} + \beta_9\text{Age} + U_2$$

$$\text{Current Behavior} = \beta_{10}\text{Current Expectancies} + \beta_{11}\text{Market Experiences} + \beta_{12}\text{Education} + \beta_{13}\text{Race} + \beta_{14}\text{Sex} + \beta_{15}\text{Age} + U_3$$

The validity of the estimation of these effects depends upon the assumption of the absence of omitted variables that are correlated with included variables in each equation and with the assumption of independent error terms in each equation. Since the present research is among the first to measure and examine the effects of self-reported market experiences and of current expectancies, we may have omitted causal variables that would have been correlated with included variables at stages two and three. However, serious bias in the estimates is introduced only if an omitted variable at a particular stage is highly correlated both with included variables at that stage and with the dependent variable as well. Future research will need to tackle estimation problems more directly than we feel can be done at the present stage of knowledge about the issues raised in this research.

Past research on some of the causal links depicted in Figure 1 has been both extensive and consistent enough to feel fairly sure of the predictions we are making. Years of schooling, for example, has consistently been demonstrated as a significant determinant of both eventual occupational position and earnings, although the rate of return to education does not turn out to be equal for all groups of workers. O. D. Duncan[31] noted several years ago that most studies show that the regression coefficients for both family background and the person's own educational qualifications in explaining eventual occupational status and earnings are typically lower for black than for white men. More recent work by Welch, Blinder, Haworth, et al (reivewed in Hoffman[32]) all continue to show much the same pattern.[33] The current controversy about different rates of return to education centers on whether the relative return figures are even worse for older, more experienced black male workers. Some people suggest that the typical cross-sectional effects on the size of black-white income differences simply reflect the effects of "vintage," particularly the correlation between an individual's age and the quality of his or her schooling (see Hoffman[34] for a review of this controversy). It would be misleading, however, if emphasizing different return rates were to imply that education does not pay off at all for blacks. Education significantly influences the market success of blacks, just not at the same rate as for whites. Years of schooling also influences the occupational position and earnings of both men and women, although previous research is not as clear whether the rate of return differs as much by sex as by race of worker. The regression coefficients for years of schooling in explaining job status seem to be quite similar for men and women.[35] Analyses of the monetary returns are thus far less clear cut. Corcoran[36] shows that the rate of return to schooling depends not only on the sex of worker but also on the sex-typing of job, and that the interactions among these variables are fairly complicated. Very little is known about the effects of education, or the relative return rates of education, for black women since practically no research on these issues has included black female workers. Most of the research on race discrimination in which these questions have received the most attention has been restricted to male workers; most of the research on sex discrimination has included just white workers. Oaxaca's[37] analysis of the earnings of all four groups of workers is a major exception in that separate regressions are presented for each of the groups, including black women. It shows that years of schooling significantly influenced black women's earnings, although less so than other variables and in no way explained sex differentials in the wages of black workers since black women are not less well educated than black men. In any case, previous research would argue that education should be included as a potentially important supply characteristic in explaining the market position or earnings of all the sex and race groups. Very little research on its effects on other market outcomes, particularly on job search behavior or level of activity in acquiring additional skills, has been carried out. Its effects on labor market participation of women, particularly of married women, seemed to be stronger in earlier periods of time, although a recent analysis by Waite[38] of the major predictors of whether women worked in the years 1940 through 1960 shows that the coefficients for years of schooling were not significant at any period time, except in the late fifties for women in the third to fourth birth interval. Likewise, education does not strongly influence plans for labor force participation at age 35 among 5,000 young women ages 14-24 in the National Longtiduinal Study of Labor Market Experiences carried out by the U.S. Department of Labor and Ohio State University.[39] Nevertheless, years of schooling might influence the employment intentions of current housewives and we used it accordingly as a stage one variable in that analysis as well.

The effects of being black and/or a woman on occupational position and earnings are by now so clearly demonstrated that most serious research attention is given to explanations of why the effects continue to be so powerful. Some of the pertinent empirical and theoretical treatments of this question were already cited in Chapter I.

Years of work experience (or age as a proxy for experience) is viewed by human capital theorists as the major determinant of income and income changes over the individual's life cycle.[40] Empirical studies on its effects provide conflicting evidence, with some showing that the inclusion of years of work experience raises the fraction of the variance in income from approximately 7% by education alone to closer to 30%.[41] Others show that the effect of experience is far weaker. An estimated work experience variable, while a significant determinant of income for all four race and sex groups, was not nearly as important as other characteristics, primarily those pertaining to site and type of job, in explaining sex differentials in wages for either black or white workers in Oaxaca's[42] analysis of the 1967 Survey of Economic Opportunity. G. J. Duncan's[43] recent analyses of the 1970-71 wage rates of black and white men from the Study of Income Dynamics shows that work experience has a powerful positive effect on the earnings of of whites but was nonsignificant for black men. Thus, while the evidence does not seem as conclusive as human capitalists argue it is, previous income research certainly does indicate that years of work experience should be included as a significant stage one variable. Since respondents were not asked directly how many years they had been employed, we used age as a proxy for work experience.

Most of the other causal links depicted in Figure 1 have not received much previous research attention. Indeed, the whole point of this research was to test whether race, sex, and education of worker distinguished the kinds of market experiences workers reported and we have seen strong support in Chapter III that they did. The effects of market experiences on expectancies were also impressively supported in Chapter IV, although the particular experience variables that influenced current expectancies depended on race and sex of worker.

The other additional link to which there has been at least some previous empirical work is the relationship between expectancies and behavior. Most of the limited work done to date has been carried out by psychologists and typically restricted to laboratory settings and to behavior on some kind of experimental task. The major exception is the work of organizational psychologists who have tried to assess the impact of workers' performance expectancies (that effort will result in successful performance) and instrumentalities (that performance will result in desired outcomes) on both effort expended and job performance. Typically the studies from this research tradition have depended on supervisory ratings of the worker's effort and performance. A recent review by Mitchell[44] of 24 studies from this expectancy-value framework provides only limited support for the behavior impact of expectancies. Only four of the studies explicitly separated expectancy from valence measures since the theory guiding these studies suggests that it is the multiplicative function of the two that influences effort and performance. Two of these four related performance expectancies to job effort, one with positive and one with negative results; three of the four examined the performance implications of performance expectancies, two with positive and one with negative results.

Very recently some studies on job success and income determination have also begun to include measures of worker expectancies. The two major national longitudinal studies of income, the Income Dynamics Study and the National Longitudinal Study of Labor Market Experiences, have used a measure of personal efficacy and found it significantly related to economic outcomes, even after controlling for education, years of market experience, and other pertinent productivity proxies. Andrisani and Abeles[45] have reanalyzed some previously reported findings which demonstrated a relationship between internal-external control and later earnings of black and white men[46] and report that this relationship is due mainly to the personal efficacy component of the I-E scale. They further suggest that because the effects of personal efficacy pertain more to improvement in annual earnings than to improvement in occupational status or to unemployment or even to hourly wage, the more personally efficacious men are able to improve their annual earnings by working more (more jobs and more hours). The efficacy effect thus seems to result from effort. G. J. Duncan[47] also finds that personal efficacy (in fact the same measure employed in our analyses), has a significant net effect on earnings, but only for white, not black men. The effect is not explainable by effort, however, since efficacy affected wage rate itself. Two studies of workers who had undergone job training likewise indicate that feelings of personal efficacy as trainees predicted job success in the six months following training.[48] The relationship found in both studies again seemed primarily to reflect effort since in one total earnings provided the criterion of job success[49] and in the other the efficacy effect was significant both for total income and number of weeks employed but not for average weekly wage.[50]

Job Status of Black and White Workers

The analysis of job status is carried out with just three stage one variables, race, years of schooling, and age as a proxy for work experience. Sex was deleted because it was not significantly related to job status either in the total sample or for either race group. (The total sample correlation was only .02.) This requires some comment since women and men, both black and white, do show considerably different occupational distributions. Women of both groups work disproportionately in the less well paying and less prestigious jobs of the professions, in clerical jobs, and in less well paying service jobs as well. The job status measures available do not capture these differences for several reasons. Variation in the status scores from higher to lower occupations within the professions is not great enough to capture the meaningful differences by sex. Moreover, since clerical jobs are accorded higher status than some distinctly male occupations below the managerial-professional levels, status scores again do not capture meaningful sex differences in occupational position. Wage rates of jobs would be a better measure of the sex differences in occupational distributions. Despite this some sociologists are giving serious attention to possible differences in the socioeconomic attainment processes of women and men, using job status as the major outcome to be explained. It is understandable that they find few differences in the attainment processes since it is the process leading to an outcome that is itself not sensitive to either sex segregation in occupations or to sex differentials in wages. As we have seen in Chapter III, job status measures are sensitive to occupational differences between blacks and whites. In both sex groups whites hold jobs with significantly higher prestige as measured by the Duncan Scale (see Table 11 , Chapter III.)

The two clusters of experience measures that were shown in Chapter IV to be independent of each other in the analyses of all four race and sex groups were the most probable experience variables to be included in the job status analysis. One cluster was comprised of three measures; a strong stress on market constraints as reasons for previous difficulties, feeling generally held back in life, and (for blacks only for obvious reasons) feeling held back specifically in the job arena by race discrimination. A simple summed index was formed to represent this cluster and will be labeled stress on constraints in the market. Zero order correlations between this index and other variables potentially relevant for the job status analysis are presented in Table 20. Only one of this set of interrelated measures (feeling held back in life) was shown in Chapter IV to be significantly related to years of schooling for any of the four groups; however, the summary index was significantly related to education for the total sample, -.203. Thus, the summary index may operate as an intervening influence between initial education, later expectancies and eventual job status, while the purer measures of market constraints and focus on race discrimination would not have. It is the general feeling of being held back in life that accounts for whatever indirect effect education has through stress on constraints in the market. By contrast, all three of the items comprising this index showed race effects, and the summary index was correlated .321 with race. It also correlated significantly with the outcome job status variable, -.183 (see Table 20).

The other cluster involved two positively related measures, one from a structured question and one from an open-ended question, of stress on own educational deficiencies. Both measures were also significantly related to years of schooling in all four groups and the summary index was correlated -.294 with education. However,

Table 20

Intercorrelations of Race, Education, Summary Score on Market Constraints and Restriction by Race Discrimination, Summary Score on Stress Given to Personal Education Deficiencies, Sense of Personal Efficacy and Current Job Status (N=1392)

Race (Black)	1.00								
High educational attainment	- .061**	1.00							
Stress on constraints in the market	.321****	- .203***	1.00						
Age (old)	- .005	- .433****	.065**	1.00					
Stress on own educational deficiencies	.078**	- .294****	.010	.013	1.00				
High employment expectancy	- .119***	.077**	- .258****	- .239****	.198****	1.00			
High job performance expectancy	- .046	.231****	.012	.028	.034	.127***	1.00		
High sense of personal efficacy	- .198****	.254****	- .256****	- .042	- .137****	.132***	.123***	1.00	
High status of current job	- .208***	.527****	- .183****	- .128***	- .098**	- .042	- .087**	.308****	1.00

*p = .05
**p = .01
***p = .001
****p = .0001

despite this relationship and the strong correlation between years of schooling and job status (.527), workers' stress on their own educational deficiencies was only weakly tied (-.098) to job status. This small zero order correlation meant that any relationship net after controlling for years of schooling would be very small indeed. We, therefore, decided not to include this experience index in the final job status analysis.

As expected from the as yet limited research on economic effects of expectancies, the general sense of efficacy proved more useful than either of the two more specific job expectancies. Sense of efficacy was correlated .308 with job status, while the specific employment expectancy related to current job status only .042, the specific job performance expectancy only .087. Moreover, of the three expectancies personal efficacy was most highly related to race of worker and was the only expectancy measure that likewise was related to both years of schooling and the experience measures we had decided to use in the analysis (see Table 20.)

Table 21 presents the standardized regression coefficients (beta weights) for all the dependent variables in the four stage model. State one variables of race and years of schooling each had significant neg effects on the variables at each of the three later stages. Age had a significant net effect on job status and sense of efficacy but not on workers' reports of past market constraints. The stage two experience of having encountered constraints in the market had a significant negative net effect on feelings of efficacy, even after

Table 21

Standardized Regression Coefficients[+] (and Standard Errors) for Explanatory Variables in Model of Current Job Status (N = 1392)

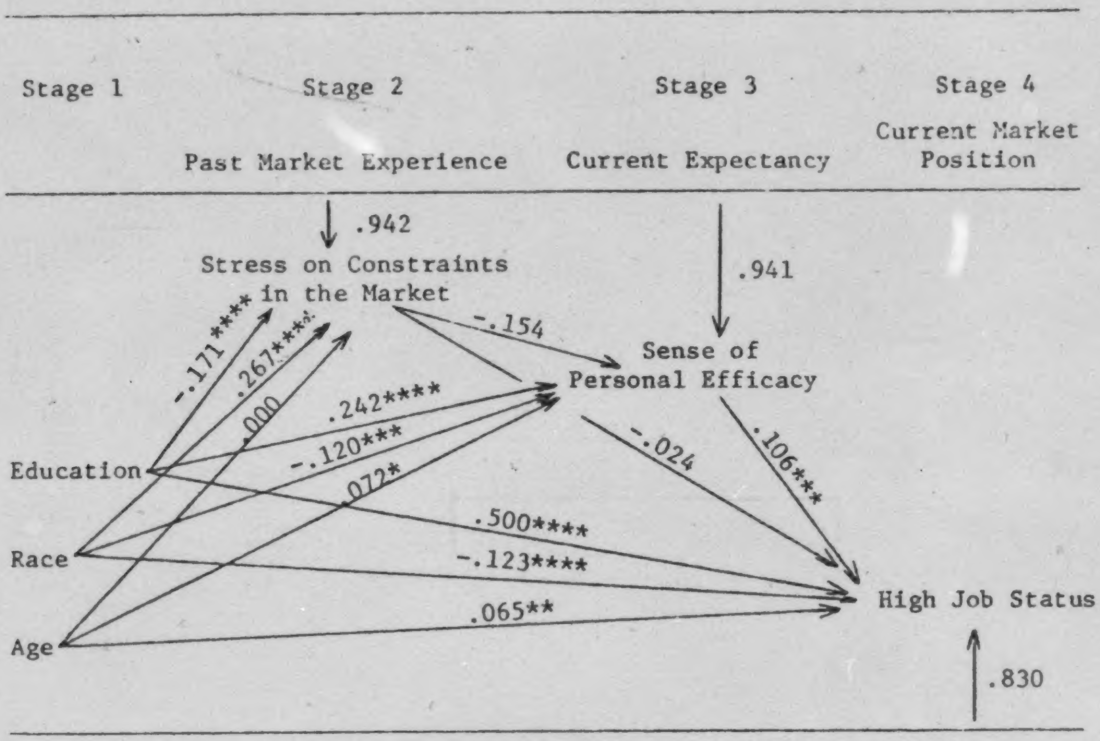
	Dependent Variables		
Predictors	Current Job Status	Sense of Efficacy	Stress on Constraints in the Market
Race	- .123**** (.028)	- .120*** (.030)	.267**** (.024)
Education	.500**** (.030)	.242**** (.032)	-.171**** (.027)
Age	.065** (.029)	.072* (.031)	.000 (.027)
Stress on constraints in the market	- .024 (.028)	- .154**** (.030)	-
Sense of personal efficacy	.106*** (.028)	-	-
R^2	.310	.116	.112

*p = .05
**p = .01
***p = .001
****p = .0001

[+] The numbers which appear in the table are "beta weights" or standardized regression coefficients. They indicate the relative size of the relationship between the dependent variables and each independent variable, when all other independent variables are taken into account.

Figure 2

Estimated Four Stage Model of Current Job Status (Direct Effects)+


Stage 1
Stage 2
Stage 3
Stage 4
Past Market Experience
Current Expectancy
Current Market Position
.942
Stress on Constraints in the Market
.941
-.154
Sense of Personal Efficacy
-.171****
.267****
.000
.242****
-.120***
.072*
-.024
.106***
Education
Race
Age
.500****
-.123****
.065**
High Job Status
.830

*p = .05
**p = .01
***p = .001
****p = .0001

+Coefficients on arrows to each of the three dependent variables which do not come from the other variables in the system measure the effects of residual factors not in the system. This number is the square root of the proportion of variance in the dependent variable not accounted for by the antecedent variables in the system.

controlling for race and years of schooling, but not a significant direct effect on job status after controlling for other variables. And the stage three expectancy was significantly related to job status, even after controlling for the influences at both stages one and two. That feelings of efficacy showed a significant direct effect (and about the size reported by Andrisani and Abeles)[51] is strong support that expectancies do matter, independently of stronger demographic influences. Much of the psychological literatue on efficacy, internal-external control, and powerlessness has been based on relationships with outcome measures without adjusting for social structural and demographic determinants (see Seeman[52] for a critical review of this problem in the psychological studies of efficacy-powerlessness). However, it is also true that the contrast between the zero order and net effects of efficacy is striking (see Table 22). The original correlation of efficacy with job status falls from .308 to .106 (only about 1/3 as large) when race, education, age and stress on market constraints are all controlled. This means that most of the expectancy effects on job status result from the far more powerful effects of race, education, age and market constraints, that influenced job status as well as feelings of efficacy. Workers who have strong feelings of efficacy hold jobs with higher status but largely because they have experienced fewer market constraints, entered the market with more years of schooling, and were more likely to be white.

One other point should be highlighted about the influence of negative experiences in the market. The total effect of having

Table 22

Comparison of Simple Correlations and Total Effects of Explanatory Variables in Model of Current Job Status; Decomposition of Total Effects into Direct and Indirect Effects

	Sense of Efficacy	Stress on Constraints in the Market	Race	Education	Age
Simple correlation with job status	.308****	-.183****	-.208****	.527****	-.128****
Total effect	.106***	-.050*	-.146****	.533****	.073**
Spurious effect	.102	-.133	-.062	-.066	-.201
Total Effect	.106***	-.050*	-.146****	.533****	.073**
Direct effect	.106***	-.024	-.123****	.500****	.065**
Indirect effect via:					
Sense of efficacy		-.016	-.013	.026	-.008
Stress on constraints in the market			-.006	.004	-.000
Efficacy and market constraints			-.004	.003	-.000

experienced constraints in the market, while small is nearly twice as large as its direct effect (see Table 22). This happens because about 44% of the total effect of market constraints on current job status operates through its indirect effect on sense of efficacy. People who have experienced market constraints have lower efficacy, which also significantly influences current job status.

How did years of schooling influence current job status? Nearly all of the total effect of education was direct (94%), rather than indirect through market experiences and sense of efficacy. This implies that skills and educational credentials are far more important than what schooling does to prevent negative market experiences or to promote feelings of efficacy and thereby result in greater effort and activity on the part of workers, at least in accounting for job status. While this is not surprising in our highly credentialized job world, the fact that only 6% of the total effect of education was indirect was surprising to us. Most of the indirect effect operated through personal efficacy (see Table 22).

The effect of age on job status reverses from a negative zero order correlation (-.128), that shows that younger workers hold higher status jobs, to a small but significant positive direct effect (.072), that shows that older workers are in more prestigious jobs, (see Tables 20 and 21). The reversal occurs primarily because of the large but opposite relationships of education to both age and job status. Older workers have acquired fewer years of schooling (-.433). Since better educated workers have achieved higher job status (.527), the original correlation between age and job status results largely because younger workers are better educated. When education is controlled, the expected experience advantage of age emerges. At any given level of education, older workers do hold jobs with higher status. Table 21 also shows, however, that the positive net effect on job status of being an older worker (.065) is far less important than the positive net influence of years of schooling and even somewhat less important than the positive net effect of a high generalized sense of personal efficacy. If age is to be viewed as a good proxy for experience, at least these results would indicate that the wage return to experience is not attributable primarily to getting into higher status jobs with increasing experience. The job status effect of experience is just too small for that to be a meaningful mediator of the wage advantage of years of experience. One other point should be noted about the effect of age as a proxy for experience in the market. The same dynamic in which years of schooling so largely accounts for the apparent job status edge for younger workers also accounts for seemingly somewhat higher efficacy among younger workers. Better educated workers feel more efficacious, and, at any given education level, older rather than younger workers expressed the highest sense of efficacy (see Tables 20 and 21).

The negative market effect of being a black worker, while reduced from -.208 to -.123 by controlling for years of experience, years of schooling, market constraints, and current expectancies, is still significant. Moreover, most (84%) of the total effect of race (-.146) operated directly, rather than indirectly (see Table 22).

The 16% attributed to indirect effects fairly equally operated through the greater market constraints experienced by black workers, their reduced feelings of being able to make things work out, and the combined effects of negative market experiences and lower feelings of efficacy. Parity in job status of blacks and whites would thus be somewhat influenced if black workers did not experience greater market constraints and reduced feelings of efficacy, but most of the job status differential would still exist. What might this mean about the way race discrimination operates? Let us use the total effect of race, net after adjusting for years of schooling and age, as the residual in job status differentials that could be attributable to race discrimination. This is at least plausible since it is the residual that remains after controlling for education, which most previous work indicates is the most powerful determinant of job status. Table 22 shows that this total effect of race is not primarily attributable to the cumulative indirect effects of past discrimination, as indicated at least by the constraints black workers talk about in reporting their past experiences in trying to improve their situations in the market. It is possible, of course, that past discrimination represented by indirect effects through workers' past market experiences and adjustments in expectancies is actually greater than our results indicate because it is greater than black workers believe it is. All of the indirect effects estimated here depend on workers' self-reports of past experiences. Independent measures of past market constraints would thus perhaps increase the impact of previous

Table 23

Interrelationships of Past Market Experiences, Current Expectancies, and Current Market Behavior
(White Women Interested in Changing Jobs, N=73)

Looking for a new job	1.00																
High employment expectancy	.14	1.00															
High job performance expectancy	.08	.12	1.00														
High personal efficacy	.25*	.16	-.14	1.00													
Held back in life	.04	-.11	-.11	-.27*	1.00												
Settled for less than hoped for	-.14	-.20	-.02	-.40***	.47***	1.00											
Held back on job by sex discrimination	-.11	-.15	-.01	-.14	.30**	.32**	1.00										
Held back on job by educational limitations	.03	-.07	-.08	-.23*	.45***	.34**	.03	1.00									
High mention of market constraints	.04	-.24*	-.05	-.09	.15	.10	.15	-.01	1.00								
High mention of family obligations	.23*	-.04	.07	-.04	.22*	.10	.06	-.04	-.07	1.00							
System blame ideology re sex inequities	.10	-.10	.24*	.25*	.10	.05	.41***	-.06	.08	-.20	1.00						
Tried a market change	.12	.05	-.08	.04	.05	-.05	-.04	-.07	-.09	.02	.13	1.00					
Tried work change	-.29**	.03	.25*	.09	-.16	.05	.04	-.05	.11	.02	.11	-	1.00				
Tried educational change	.19	.03	-.13	.05	.05	.03	-.05	.12	.06	-.02	.02	-	.52***	1.00			
Years of school attained	.43***	.07	.13	.35***	-.20	.02	.09	-.10	.01	-.10	.43***	.30**	.17	.16	-1.00		
Married	.02	-.06	.18	.01	.08	.07	.00	.05	.03	.28*	-.16	-.06	.06	-.07	-.03	1.00	
Age (old)	-.06	-.15	.15	-.16	.18	.18	-.04	.12	.06	.10	-.29*	.01	.08	-.09	-.34**	.38***	1.00

*p = .05
**p = .01
***p = .001

Table 24

Interrelationships of Past Market Experiences, Current Expectancies and Current Market Behavior
(White Men Interested in Changing Jobs, N=124)

Looking for a new job	1.00															
High employment expectancy	.06	1.00														
High job performance expectancy	.28**	.14	1.00													
High personal efficacy	.13	.10	.14	1.00												
Held back in life	- .01	- .02	.07	- .30**	1.00											
Settled for less than hoped for	- .07	.00	- .05	- .35***	.16	1.00										
Held back on job by educational limitations	- .07	- .01	- .07	- .01	.18*	.21*	1.00									
High mention of market constraints	- .24*	- .25**	.00	- .09	.30**	.05	.05	1.00								
High mention of family obligations	.07	- .03	- .10	- .06	.19*	.10	.08	- .03	1.00							
System blame ideology regarding sex inequities	- .09	- .01	.00	.03	.08	.00	- .04	.01	.01	1.00						
Tried a market change	.13	- .01	.06	- .05	- .03	- .05	.00	- .02	.02	- .03	1.00					
Tried work change	.23*	- .01	.06	.02	- .07	- .03	.02	- .07	.08	- .01	-	1.00				
Tried educational change	- .04	.06	.05	- .02	.00	.03	.01	.02	- .06	- .02	-	- .43***	1.00			
Years of schooling attained	.15	.03	.23*	.22*	- .21*	- .26**	- .13	- .02	- .09	.23*	.23*	.08	- .08	1.00		
Married	.03	.10	.07	- .02	.00	.00	- .03	.04	.10	- .07	- .03	.04	.03	- .18*	1.00	
Age (old)	- .02	- .08	.21*	- .02	- .03	.12	.07	- .06	.06	- .24*	- .02	- .06	- .05	- .17	.34***	1.00

*p = .05 **p = .01 ***p = .001

experiences as a mediator of previous discrimination. We will return to this issue in the last chapter where we suggest a model that gives greater attention than the model estimated here does to present market discrimination.

Looking for Work: White Men and Women Interested in a Job Shift

The analysis of the search behavior of employed people interested in changing jobs is restricted to whites since the already small black sample resulted in very few black men and women interested in changing jobs. We learned in Chapter III that fewer white women interested in changing jobs were actually trying to find a new job. We intended to apply our education-experience-expectancy model to test whether the net effect of sex on search behavior would be considerably smaller when sex differences in experiences and expectancies were controlled. However, when we examined zero order correlations between education, experiences, expectancies, and search behavior for the total white subsample interested in changing jobs and separately for men and women, we discovered a different pattern of effects for men and for women (see Tables 23 and 24). Education was more important for women (.431) than for men (.152). Different experiences were correlated with looking for a job. Men who had experienced previous market constraints were less likely to look (-.242), while this experience was irrelevant for women's search behavior (.042). Women who stressed previous family obligations were now more active in actually trying to change jobs

(.235), while previous family obligations were immaterial for men (.069). Moreover, previous attempts to improve one's market position by making work related changes affected men's and women's current search behavior in opposite ways, positive for men (.213) and negative for women (-.293). Finally, different current expectancies were significantly tied to current search behavior for men and women. Men with the highest job performance expectancies were most active (.281), while performance expectancies were only weakly related (.080) to the search behavior of women. Women who felt generally most efficacious were most likely to look (.254). We therefore ran separate regressions of the search behavior of men and women.

Let us consider white women first. The intercorrelations in Table 23 suggest that years of schooling, personal efficacy, and search behavior interrelationships do fit the type of model we have laid out. Better educated women in this subsample interested in a job change felt more efficacious (.352) and were also more likely to be looking for a new job (.431); in addition, more efficacious women were more active (.254). Efficacy seemed to fit the intervening role we have depicted for expectancies; education should have both a direct effect on search behavior and an indirect effect through efficacy. However, the interrelationships of education, the two pertinent experiences (stress on family obligations and previous efforts to improve their market position through job changes) and current search behavior indicate that eduation probably suppresses the power of the earlier experiences. How does Table 23 show this? Although better educated women were somewhat less likely to stress family obligations (-.102) and more likely to be looking for a job at the present time (.431), previous stress on family obligations was positively (.235), not negatively related to current search behavior. The same dynamic appears likely in the effect of previous job change efforts. Women who had tried previously to make job-related changes were now less (-.293), not more likely to be looking, despite the fact that better educated women had somewhat more often tried work changes (.174) and were more active presently (.431). In one instance education seemed to be suppressing the positive effect of attributing previous difficulties to family obligations; in the other education seemed to be suppressing the negative effect of previous experience with job change efforts.

What does the multivariate analysis reveal about these effects? Table 25 shows the standardized regression coefficients (beta weights) for these four variables that were originally significantly related to the current job search behavior of white women.* The net effect of personal efficacy was no longer statistically significant and considerably smaller than its zero order effect. Much of the influence of the generalized expectancy, the sense of efficacy, can be explained because better educated women feel more efficacious.

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*It is interesting to note that neither age as a proxy for work experience nor marital status was significantly related to looking (see Table 23). In fact, the originally small effect of age (-.06) would have showed an even smaller net effect after controlling for years of schooling since younger women were significantly better educated (-.340). We did not use either age or marital status in the final regression analysis presented in Table 25.

Table 25

Regression Coefficients (and Standard Errors) of Best Predictors for White Women of Looking for Work If Interested in a Job Shift

	White Women Standardized	White Women Metric Form	White Men Metric Form
Education	.378*** (.108)	.545*** (.156)	.192 (.109)
Sense of efficacy	.152 (.105)	.203 (.139)	.201 (.131)
Tried job change in the past	- .357*** (.101)	-1.88*** (.531)	1.02** (.374)
High stress on family obligations as previous market problem	.291** (.099)	1.07** (.363)	.830 (.830)
R^2	.329	.329	.092

*p = .05
**p = .01
***p = .001
****p = .0001

Table 25 also shows that the effect of previous attempts to make work-related changes and previous stress on family obligations are indeed larger once the suppressor effect of years of schooling was controlled. This implies that the group of employed women who are both interested and active in trying to change jobs at the present time are a particular group of educated women, those who had been housewives with family obligations that previously held them back and who had not tried job shifts before. These women are now involved in work, do not feel held back by the family, and are active in their own behalf. The educated women who had previously tried job changes and did not stress family obligations as reasons for their past difficulties are not so actively involved in trying to change jobs.

Table 25 also highlights the differences in the dynamics of men and women who were interested in changing jobs. These four variables explain 33% of the variance in the search behavior of women but only 9% of the variance for men. Moreover, the only variable that was statistically significant for men is previous job efforts, and it was positively, not negatively related to their current search behavior. The metric form (nonstandardized) regression coefficients also show that education was far more important for women than for men.

Even the best predictors for men do not explain as much of the variance in their search behavior as women's best predictors do for them (see Table 26). Only 13% of the variance in men's search behaviors explained by four expalnatory variables, years of schooling, previous job change efforts, stress on market constraints in previous market

Table 26

Regression Coefficients (and Standard Errors) of Best Predictors for White Men of Looking for Work if Interested in a Job Shift

	White Men	White Men	White Women
	Standardized Form	Metric Form	Metric Form
Education	.108 (.092)	.128 (.109)	.601*** (.161)
High job performance expectancy	.121 (.091)	.293 (.221)	.254 (.257)
Tried job change in the past	.217** (.087)	.918** (.367)	-1.91*** (.646)
High stress on market constraints in previous market experience	- .207** (.086)	- .709** (.294)	.179 (.357)
R^2	.128	.128	.220

*p = .05
**p = .01
***p = .001

experience, and job performance expectancies. The model we have laid out is not very useful in explaining men's search behavior in another sense as well. The two significant experience effects (stress on market constraints and previous job change efforts) are not the intervening states through which education influences search behavior. Moreover, these two experiences do not influence the one relevant current expectancy, being confident of performing well on the job. The experience of having tried a job change in the past positively influences current market activity; its net effect is almost as large as its unadjusted effect. Having experienced previous market constraints negatively but independently influences which men actually look for a new job; its net effect likewise is approximately its unadjusted effect. These two experience effects are important in contributing to the explanation of search behaviors but they are not very useful in understanding how the other variables in the model operate. The one set of variables that fits the type of model depicted here, but with very small effects, is years of schooling, job performance expectancies, and current search activity. Years of schooling directly but weakly influences looking; it also indirectly but weakly operates through job performance expectancies. The net effect of the performance expectancy is much smaller and no longer significant after controlling for previous education. The more self-confident men are more active primarily because they are better educated. Altogether, however, these direct and indirect effects of education, and the direct effects of expectancy, are not nearly as important as the direct influences of previous experiences. The primary determinants of whether white men who are interested in a job shift actually look for a new job are whether they had looked before and whether they report previous difficulty in finding jobs before.

Several points should be highlighted in these two analyses. First, the dynamics of the job search depend greatly on the sex of the worker. Second, even the best predictors for men explain only one third as much variance in search behavior as the best predictors do for women. Third, the intervening influences depicted in our model are best supported by the interrelationships of education, expectancy, and current behavior for both groups. Among women, years of schooling influences current search activity both directly and indirectly through the generalized expectancy, sense of personal efficacy. The more personally efficacious women are more active but primarily because they are better educated. Among men, years of schooling influences looking directly (but much more weakly than is true for women) and indirectly through the specific expectancy of job performance confidence. The intervening role attributed in the model to experiences and expectancies is least well supported for both groups by the results with the previous experience measures. Previous experiences directly influence current search activity but they do not seem to mediate the effects of education nor do they indirectly influence looking through job expectancies. Fourth, the most important influences for both men and women are provided by their previous experiences. Expectancies are not very important for either group; the net effect of personal efficacy is not significant for women; the net effect of job performance expectancy is not significant for men. Instead it is a particular group of better educated women who are most active at the present time -- those women whose education did not influence them to make job change efforts earlier and who felt held back by family obligations at an earlier point in their lives despite the fact that education normally decreases that particular type of attribution for previous market difficulties. The men who are most apt to look are those who looked previously and who do not believe that the market had previously held them back. We conclude that search behavior as measured here, contingent as it is on the interest in a job shift among employed people, is best explained for women by years of schooling (and the particular meaning education has for women previously involved in the family) and for men by previous market experiences alone.

Future Work Intentions of White Housewives

All of the results presnted in Chapters III, IV, and V pertain just to respondents who were not housewives in 1972. We were also interested in applying our general education, experience, expectancy model to the future employment intentions of housewives who were not working at all, or at most less than half time in the preceding year. These analyses were restricted just to white women because the already small sample of black women (146) provided only 46 housewives. A series of questions were asked of housewives with no more than half time employment the preceding year to detail their attitudes about work outside the home and about taking care of the home and raising children. The final two questions in this series attempted to measure employment desires and intentions: "If you could have someone to take care of things here at home, would you like to take an outside job right now, or are you happy enough to be at home?" and, "Do you think you are likely to take an outside job in the future?" Employment intentions, with three degrees of intention (definitely yes, maybe, definitely no), are provided by the second of these questions.

Figure 3 shows the schematic diagram of a model of employment intentions of housewives. Five rather than four stages are included in the model. Current work intentions at stage five are viewed as the result of: 1) years of schooling at stage one, 2) later efforts to improve their market value (in this instance primarily through acquiring additional schooling since few housewives reported work-related change efforts), 3) immediately past market experience, specifically whether they had worked at all for pay during the preceding year, and 4) current expectancies. Two expectancies are included in the model. We predicted that the actual employment intentions of housewives would be stronger if they felt generally efficacious in life and if they specifically felt they could find a job easily if they tried. Both the general and specific expectancies are depicted as influenced by the same sets of preceding experiences.

We also applied the same model to a second, fifth stage dependent variable, desire for employment outside the home. Answers to the desire question were dichotomous: respondents chose either they "would like to take an outside job," or "I am happy enough to be at home." We hypothesized that desire for employment would not be as influenced as actual intentions would be by expectancies of being able to find a job or by previous market experiences. Although some women may develop the desire to work outside the home if they somehow have the experience of working at a job, desire probably has much more to do with sex role attitudes and earlier sex-role socialization experiences than with previous job experience or market expectancies. We have not attempted to test this part of the differential prediction about desires and intentions, although it should be followed through in a study with good measures of two kinds of experiences -- sex role socialization experiences and labor market experiences -- and with two kinds of current psychological dispositions -- sex role attitudes and expectancies of market success. The results covered here speak only to the hypothesized greater relevance of market experiences and expectancies to intentions than to desires. We predicted that the education-market experience-market expectancy variables included in our model would explain much less variance in the desires than in the actual employment intentions of housewives.

The zero order correlations presented in Table 27 substantiate that desire to work outside the home is not influenced by previous market experience or by current expectancies of being able to find a job. The only variables that were significantly and positively correlated with employment desires are years of schooling, the sense of having been held back generally in life, and attributing previous difficulties to family obligations. In addition, sense of efficacy was negatively related to desire for employment. Better educated housewives who felt held back, particularly by family obligations, and who did not feel very efficacio

Table 27

Zero Order Correlations of Education, Previous Market Experiences, Current Expectancies with the Employment Desire and Intentions of White Housewives (N = 554)

	Desire to Take Job Outside the Home	Intention of Getting Job Outside the Home
Education	.110**	.323****
Tried something to improve market position in past	.030	.282****
Worked for pay immediately previous year	.055	.298****
Felt held back in life	.181****	.073
Held back in job arena by educational limitations	.078	.067
High mention of market constraints as previous market problem	-.020	-.143***
High mention of educational deficiencies as previous market problem	.067	.001
High mention of family obligations as previous market problem	.147***	.039
High mention of financial difficulties as previous market problem	-.083*	-.148***
Sense of personal efficacy	-.116**	-.001
High expectancy of being able to find job easily, if tried	.039	.247****

*p = .05
**p = .01
***p = .001
****p = .0001

Table 28

Intercorrelations of Explanatory Variables Significantly Related to Either Employment Desires or Intentions of White Housewives (N=554)

Education	1.000										
Tried something to improve market position	.221****	1.000									
Worked for pay immediately previous yar	.214****	.184****	1.000								
High expectancy of being able to find job easily, if tried	.242****	.051	.120**	1.000							
Sense of personal efficacy	.217****	.186****	.025	.198****	1.000						
Desire to take job	.110***	.030	.055	.039	- .116**	1.000					
Intention of getting job outside home	.323****	.281****	.298****	.247****	- .001	.339****	1.000				
Felt held back	- .144***	- .038	- .028	- .153***	- .303****	.181****	.073	1.000			
High mention of family obligations as previous market problem	.018	- .046	.072	- .014	- .100**	.147***	.039	.203****	1.000		
High mention of market constraints as previous market problem	- .107**	- .044	- .071	- .263****	- .166****	- .020	- .143***	.122**	- .149***	1.000	
High mention of financial difficulties as previous market problem	- .038	- .046	- .099*	- .148***	- .048	- .083	- .148***	.098*	- .208****	.114**	1.00

*p = .05
**p = .01
***p = .001
****p = .0001

(despite the positive impact of education on efficacy) were somewhat more interested in working outside the home. This is a picture of a frustrated housewife, not a picture of a housewife now eager for employment due to previous work experience or positive expectations of success.

Employment intentions, however, do seem to reflect the interrelated influences of education, market experience, and optimistic expectancies at the present time. All of these variables that we predicted would facilitate actual intentions were significantly correlated with intentions to find a job in the future (see Table 27). The contrast of the effectiveness of these predictor variables for intentions and desires is even sharper in the multivariate results presented in Table 29. The combined education, experience, and expectancy variables explained only 5% of the variance in housewives' employment desires but 24% of the variance in their actual employment intentions.

Table 29 also shows that all of the variables included in our model had significant direct effects, and all but personal efficacy, nearly equally important positive effects on employment intentions. Particularly impressive is the fact that positive expectancies of being able to find a job directly influences future intentions to take a job, even after controlling for years of schooling and previous work experience. Moreover, its importance is nearly as great as the importance of previous experiences and education. Housewives who intend to take a job in the future are better educated, have tried to improve their market value (primarily by acquiring more education), have more often worked in the

Table 29

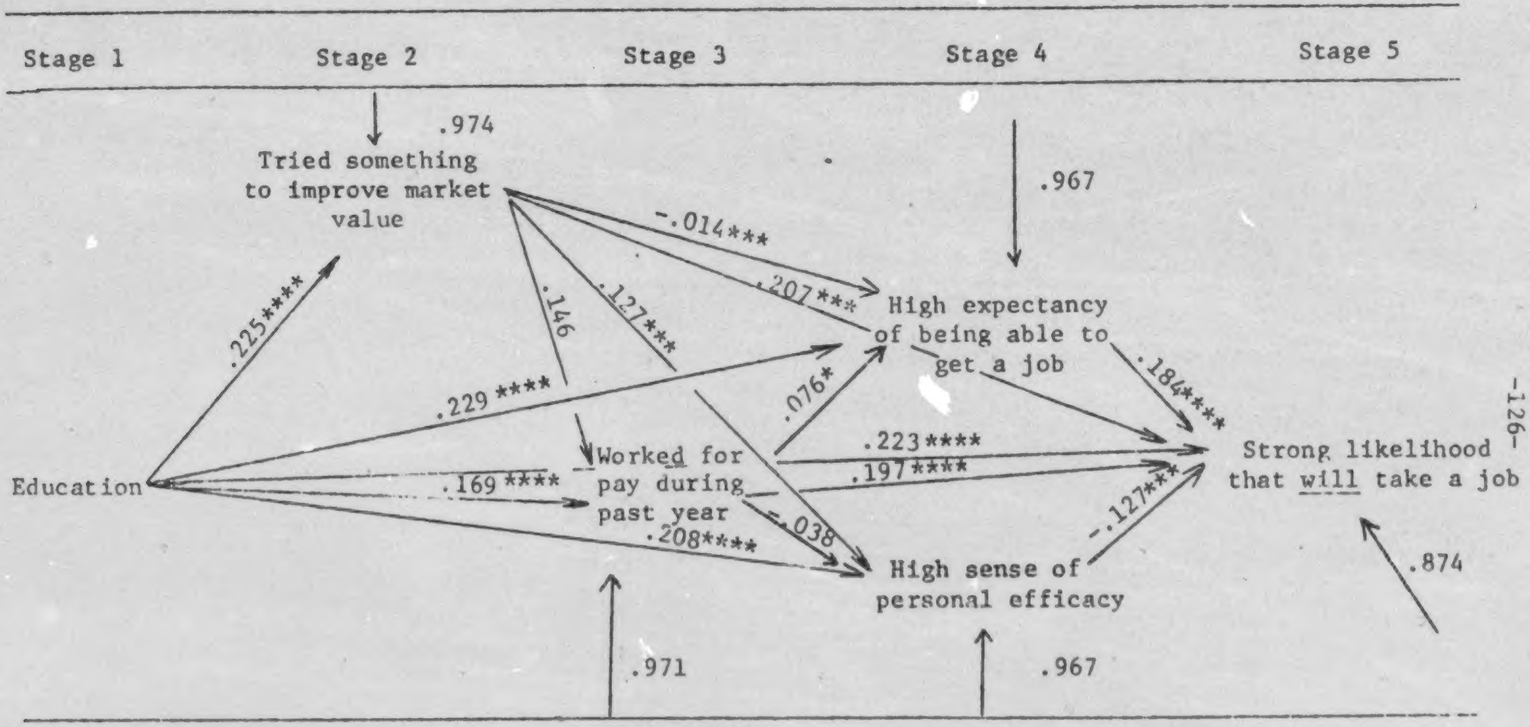
Standardized Regression Coefficients for Explanatory Variables in Model of Employment Desires and Intentions of White Housewives (N = 554)

	Dependent Variables					
Predictors	Desire to Take Job Outside Home	Intention of Getting Job Outside Home	Expectancy of Being Able to Find Job Easily	Sense of Personal Efficacy	Worked for Pay the Immediately Past Year	Tried in Past Something to Improve Market Position
Years of schooling	.104**	.223****	.229****	.208****	.169****	.225****
Tried something in past to improve market position	.131***	.207****	-.014	.127***	.146***	-
Worked for pay the immediately past year	.009	.197****	.076*	-.038	-	-
Sense of personal efficacy	-.169****	-.127***	-	-	-	-
High expectancy of being able to find job easily, if tried	.039	.184****	-	-	-	-
R^2	.050	.235	.064	.065	.061	.050

*p = .05
**p = .01
***p = .001
****p = .0001

Figure 4

Estimated Five Stage Model of White Housewives' Employment Intentions


Stage 1
Stage 2
Stage 3
Stage 4
Stage 5
.974
Tried something to improve market value
.967
-.014***
.207***
High expectancy of being able to get a job
.225****
.146
.127***
.076*
.184****
.229****
.223****
.197****
Strong likelihood that will take a job
Education
.169****
Worked for pay during past year
-.038
-.127***
.208****
High sense of personal efficacy
.874
.971
.967

immediate past, but are also more confident of being successful in the job search, beyond even the increased confidence that comes from greater educational attainment. Sense of efficacy operates very differently, however. Although better educated women and those who have tried something to change thier life situations feel generally more efficacious (see Table 29 and Figure 4), the more efficacious housewives less often intended to get a job outside the home. Since most of the efforts hosuewives reported having made to alter their life situations (or improve their market value) involved acquiring more education, both of the significant direct effects on sense of efficacy came from education. Previous work for pay did not significantly influence sense of efficacy. It seems plausible, therefore, that the educational effect on efficacy is different from the educational impact that encourages housewives to work outside the home and increases their confidence that they can find work if they want to. Educated housewives have come to feel more efficacious than housewives with less education, but it is expressed in other sectors of life and does not result in stronger employment intentions. (This negative effect of efficacy was masked in the zero order correlations presented in Table 27 because of the suppressor effects of education).

These results lend substantial support for the applicability of our model for the work intentions of white housewives. Expectancy of being able to find a job had a clear direct effect on intentions, nearly as large as the direct effect of education or previous experience. This contrasts markedly with the role of expectancy in

Table 30

Comparison of Simple Correlations and Total Effects of Explanatory Variables in Model of Housewives' Employment Intentions: Decomposition of Total Effects into Direct and Indirect Effects

	Sense of Personal Efficacy	Expectancy of Being Able to Find Job Easily, if Tried	Worked for Pay Immediately Past Year	Tried Something in Past to Improve Market Position	Education
Simple correlations with employment intentions	-.000	.247	.299	.282	.323
Total effect	-.127	.184	.216	.220	.323
Spurious effect	-.127	.063	.083	.062	-
Total effect	-.127	.184	.216	.220	.323
Direct Effect	-.127	.184	.197	.207	.223
Indirect effects via:					
Sense of personal efficacy			.005	-.016	-.026
Expectancy of being able to find job easily, if tried			.014	-.003	.042
Worked for pay immediately past year				.029	.033
Tried something in past to improve market position				-	.047
Worked last year and expectancy of being able to find job				.002	.002
Worked last year and sense of efficacy				.001	.001
Worked last year and tried something to improve market position					.007
Tried something to improve market position and expectancy of being able to find job					-.001
Tried something to improve market position and sense of efficacy					-.004
Tried something to improve market position, worked last year, and sense of efficacy					.0002
Tried something to improve market position, worked last year, expectancy of being able to find job					.0005

explaining job status or in explaining the search behavior of respondents interested in changing jobs. The expectancy most relevant to job status, sense of efficacy, affected current status primarily because better educated workers felt more efficacious and also held jobs with higher prestige. Efficacy had only a small, though still significant, direct effect on the outcome market variable. Expectancies were even less impressively tied to search behavior among white men and women who were interested in shifting jobs.

There is yet another way in which the model we have delineated is better supported by the results on the work intentions of housewives. The experience and expectancy variables we view as mediators of education do seem to perform that role much better with employment intentions than with other criteria. Almost all of the effect of education on job status was direct, and the model was so inappropriate to search behavior that we did not estimate the indirect effect of education through later experiences and expectancies. By contrast, nearly a third of the total effect of education on housewives' employment intentions was mediated by later experiences and expectancies (see Table 30). Education directly promotes the probability of taking an outside job but also indirectly encourages it, through these housewives' past efforts to improve their market value and by increasing their confidence of being able to find a job if they try. Education also operated indirectly, although somewhat less strongly, through greater work experience (see Table 30). These results therefore indicate that original schooling may eventually influence the employment intentions of housewives who haven't been continuously committed to the labor market at least partly through its impact on whether housewives have any market related experiences and gain confidence in successfully finding employment. This is all the more striking since desire to work outside the home is not affected by these educationally-related experiences and expectancies.

The role of experience itself should be noted since past improvement efforts and immediately previous work experience both continued to promote work inentions, even after controlling for years of schooling. These direct experience effects, moreover, approximate the direct effect of years of schooling. This indicates that later experiences -- those that have come to be known as the continuing education and mid-life work experiences of housewives -- can be critical in themselves. Moreover, almost all of the effect of these subsequent experiences are direct; very little of their impact operates indirectly through producing more optimistic job interventions (see Table 30). Taken together, the results suggest that work with housewives who are interested in finding a job can be effective through several routes -- through providing additional education which will both directly and indirectly influence work intentions, through helping housewives get out in the market for some form of paid employment, if even very part-time, which then directly influences future work intentions, and through providing information and counseling about ways to find a job so as to promote their expectancies of being successful in the job search.

CHAPTER VI

DISCUSSION AND IMPLICATIONS FOR COUNSELING AND FUTURE RESEARCH

Investment Strategies

One of the major economic theories of income determination suggests that workers' decisions about investing in their own human capital largely determine the amount of income they eventually earn. Workers who show the optimal pattern of investment by sacrificing current income for training investment early in their careers should show the highest eventual rate of return. In fact, very little research has investigated the actual decisions workers make about investing in their futures. What did our results show about these four groups of workers' past investments?

Black and white men and women differed very little in how frequently they had tried to do something to improve their market value. Past discrimination seems not to have convinced women and black men that it is unwise to invest in their human capital since approximately the same proportion of all groups (white women slightly less) reported having tried something. Moreover, the number of investments or improvement efforts of those who had tried something was comparable in the four groups. Group differences were significant, however, in what type of investments the workers reported. More men had invested in job training and job-shifts to improve their situations; more women, particularly black women, had invested in acquiring additional schooling.

Is this imbalanced effort in education a reasonable investment strategy for women? Is increased education as important as job changes, job training, or attempts to get into apprenticeship programs in producing a better economic situtation for women? Is education more important for women than for men? What does previous research tell us about the returns to education, job training, and work experience in accounting for the earnings of black and white men and women? Human capital research by economists and the new sociological research emphasis on processes of socioeconomic attainment do not provide as many clues to these questions as we had hoped. Most of the work that decomposes earnings into ascribed status effects, the respondent's own supply characteristics, demand characteristics, and race discrimination, has been carried out with men. Most of the work that has followed the same model to tease out the importance of supply characteristics and sex discrimination has been carried out on whites. Only a few studies have performed regressions for all four groups. What does the limited evidence show?

Oaxaca's[53] analysis of the earnings of the four race and sex groups from the 1967 Survey of Economic Opportunity data shows that wage returns to schooling were lower for white men than for the other groups, while work experience (estimated from age and schooling) had higher regression coefficients for white men than for black men and both groups of women. The work experience coefficient for black women was much lower than for all other groups. (These results cannot tell us, however, whether the heightened significance of experience/training for white men was because of higher returns or greater investment.) Neither education nor work experience were as important, moreover, as industry site, class of worker, and occupational position in explaining the wage differences between white men and women and between black men and women. Thus, even if education carried similar wage returns to men and women, a sizeable investment in education might not do much to reduce the wage differentials between the sexes. Corcoran's[54] analysis of sex differences in the wages of white workers from the 1971 Census Employment Survey shows that returns to various worker qualifications is a highly complicated matter. The results show that men and women do not have the same wage equations but they do not unambiguously support that all types of worker qualifications provide lower returns for women or that returns in female jobs are always lower. Women, compared to men, had significantly higher returns to post high school education and significantly lower returns to work experience and training (estimated from age, education, number of children, marital status, and family income) in both male and female jobs. Both men and women received higher returns to vocational education and lower returns to geographical mobility in female than in male jobs. Still other of Corcoran's results indicate that wage determination rules depend on both sex of worker and sex typing of job.

Counselors who work with women who are returning to the labor market or with young women who have not even left it and are trying to plan their economic futures wisely should be able to offer information about probable returns to various educational and job-related investment strategies. Unfortunately, most previous research, guided by human capital theory, has assumed that different types of work experience-training investment should have the same wage consequences and thus need not be distinguished. Most of the research has also estimated rather than directly measured work experience and training. Practically no previous research has studied the impact of job shifts that would be provided by a detailed job history as a form of human capital investment. Very little previous work has included black as well as white, male as well as female workers in the same analysis. We know practically nothing about these issues for black women. Far too little has had Corcoran's sophisticated effort to tease out the effects of sex of worker and sex-typing of job. Thus, it is much too premature to use prior research to advise whether black and white women's disproportionate effort at improving their educations is actually functional for their market success. If most women end up in female jobs (either because they prefer them or settle for them), and if employers in such jobs stress middle level educational skills as Oppenheimer[55] suggests they do, educational improvement may be the only realistic path for large numbers of women workers to follow to improve their earnings. If male jobs are increasingly opened to women, the investment strategies that the women from this sample were following may not be as advisable. The marked difference in types of investments reported by both groups of women and both groups of men, particularly the almost exclusive emphasis of black women on improving their market value by acquiring additional schooling, should at least raise questions for counselors, educators, and the exponents of wage determination theories that emphasize workers' own training investments. Black women have been no less active than black or white men in investing in their own human capital;[56] white women have been only slightly less active. But women have invested in different ways. Have women been convinced that education is the only, or at least the best, avenue for investing in their economic futures, when the evidence is far from conclusive that they should? Future research must tackle the question of the relative return to different kinds of investments for different kinds of workers if counseling information is to be maximally useful to workers who are trying to maximize their economic returns. We do not mean to imply that wage return information should take precedence over other information about specific jobs and probable "gratifications," but workers who do want maximal wage returns should be able to find out more than is presently available about returns to different types of investments. If only the amount, rather than type, of investment truly affects life-time earnings, empirical evidence should be marshalled to support what is now just assumed.

The need for this kind of research is further highlighted by our results that show that investment strategies were associated with different experiences and expectancy implications in the four groups of workers. Let us review the results briefly. Although black men as frequently as white men had tried to improve their market position and had invested approximately as often in work vs. educational changes, their efforts to make job training or work changes were associated with feeling held back in life, with more frequent mention of educational deficiencies as limiting them in the market, with financial problems, and with a lower sense of personal efficacy and somewhat lower expectancies of being able to get another job at least as good as their present ones. White men who had tried job changes, by contrast, did not report any distinctive pattern of experiences, either positive or negative, nor were their current expectancies and sense of efficacy tied to their previous investment efforts. The one consequence for white men of having invested in work-related improvement efforts in the past was its positive impact on the search behavior of those white men who were presently interested in shifting jobs. In that group of white men, previous efforts to make job-related improvements were the most important positive predictor of who was actually looking for work at the present time. Previous search experience encouraged present search experience. Moreover, this effect of previous job-related experience was almost entirely direct; it neither mediated effects of schooling nor influenced later expectancies in this group of white men. Taken together these results indicate that the nearly equal investment that black and white men reported having made in job-related effort to improve their market value was largely discouraging and negative to black men and either irrelevant or positive to white men. Our sample of black men interested in a present job shift was much too small to follow through the current behavioral implciations of this past discouragement from past investment in job-related efforts. Future research should investigate this form of discrimination much more thoroughly than has been done in the past. Does the lack of pay-off from past investments eventually alter black men's willingness to continue to invest in their own training, as human capital theory suggests it should? Future research should give much more attention to current consequences of the negative pay-offs that black men report having experienced when they previously tried to invest in job-related market improvements.

The experience and expectancy correlates of the previous investment strategies of women also differed from white men and from black men as well. While job-related improvement efforts were rarer among women, particularly black women, they were attempted by the better educated black women and were associated for both groups of women with positive psychological outcomes, not negative outcomes as they were for black men. Women who had tried to improve their market value by making job-related investments less often stressed their own educational deficiencies and they expressed higher job expectancies, especially higher confidence about their job-related abilities. Results from the analyses of the future work intentions of white housewives likewise shows positive implications of previous job-related experiences. Better educated women had more often tried to do something to improve their market situation and had more frequently worked at least part-time the previous year. Schooling and experience then influenced these housewives' employment expectancies, specifically the feeling that they could find a job easily if they tried. And positive employment expectancies directly influenced current work intentions, even after adjusting for this earlier schooling and experience that also encouraged the intention to work. While the direction of these effects cannot be substantiated in these cross-sectional data, they suggest that future research should explore the possibility that women's feelings of performance confidence, as well as their expectancies about finding employment, would be increased more by gaining additional experience in the job market and by being helped to make job changes than by depending so greatly on acquiring additional schooling as a major investment strategy. The results we have presented show that both black and white employed women felt more confident of their job performance abilities when they had tried to make job-related improvements but less confident when they had tried to acquire additional schooling. Their actual schooling moreover was irrelevant for their feelings of confidence about job performance. White housewives' expectancies and work intentions were influenced by both schooling and previous job-experience. The one set of results that questions the positive implications of gaining work-related experience is the negative impact that previous job-related improvement efforts had on the current search behavior of white women interested in a job shift. The most active white women were a particular group of better educated women -- those who had not previously tried to make job-related improvements and had felt held back by family obligations. Since higher education increased the likelihood of trying job-related improvements and decreased feelings of restriction from family obligations in the total sample of white women, and in the sample of black women as well, this particular negative finding may reflect something unique about the sample of white women who were presently interested in a job shift and were thus asked the search behavior question. All the other results point to positive, not negative, expectancy implications (and to potentially positive behavioral implications) for women from gaining job-specific experience instead of relying so predominantely on acquiring additional schooling.

Schooling and Reactions to Schooling

Years of schooling was an important determinant of subsequent experiences, some of the explanations workers offered for what had happened to them in the market, the current expectancies of men but not women, current job status, search behavior especially among white women, and the work intentions of white housewives. Let us review these major effects of education. The better educated among all groups of workers had more frequently tried to do something to improve their market value, although schooling generally did not distinguish whether they had invested in acquiring additional education or job-related training. It was only among black women that greater education promoted greater investment in work-related improvement efforts. Better educated workers also felt less restricted in life and particularly less often mentioned educational deficiencies as major sources of market problem. Education, however, was not related among any group to workers' stress on market constraints as reasons for their market difficulties. It likewise did not distinguish which black workers said that race discrimination had affected their market outcomes. Schooling further had little effect on the job expectancies of women, although better educated men, both black and white, were more confident about their future employment chances and about their job-related performance. Women's job expectancies, by contrast, were affected more by their market experiences than by schooling per se. The effect of schooling on current job status was sizeable, nearly all of which was direct rather than indirect through workers' experiences and current expectancies. The small indirect effect operated almost entirely through the increased feelings of personal efficacy of better educated workers. The impact of schooling on current job search behavior depended on the sex of the worker. Among women intersted in a job shift, education did significantly facilitate actually looking for a new job. Education was approximately as important as their past experiences in accounting for their current search behavior. However, among men interested in a job shift, education was not nearly as important as whether they had previously tried to improve their market value through work-related investments and whether they had encountered serious market obstacles in their previous efforts. Education neither influenced these experiences nor was it very important in accounting for which men were presently looking for a new job. Just as employed white women's search behavior was greater with greater education, white housewives' future intentions of actually getting a job outside the home were also considerably stronger with greater education. The direct effects of schooling on future work intentions were approximately as large as the direct effects of previously having tried some market improvement and having worked at least part-time in the past. Moreover, schooling promoted these experiences and current confidence about being able to find a job, both of which then directly influenced work intentions as well.

In all these ways schooling clearly mattered in the subsequent experiences, psychological expectancies, and current behaviors or intentions of both employed workers and housewives. For most workers schooling was also clearly more important than were their reactions and feelings about the schooling they had attained. Stress on educational deficiencies surfaced much more frequently among the less well educated but then did not influence expectancies or current behavior in very strking ways. It was primarily among black men that reactions to schooling seemed to carry motivational implications. The results for black men deserve further comment.

Black men emphasized their own personal educational deficiencies as reasons for previous market difficulties more than all other groups. Their reactions also influenced their current expectancies more than was true of the other groups. It might be tempting to suggest from these results that black men were overreacting to their schooling in an unrealisticmanner and their reactions are "just psychological problems" that should be handled by counseling. We think this is not true. Black men seemed to be reacting quite realistically to their experiences in the market because actual schooling and reactions to schooling had very different implications for their job expectancies, depending on whether the expectancy measured focussed on their own performance potential or on the market's likely response to them. Employment expectancies were greatly influenced by black men's reactions to their educational qualifications and not by their actual years of schooling. In fact, emphasis on their own educational deficiencies was the most important predictor of black men's expectancies about being able to get a job as good as their present one. Their job performance expectancies, however, were powerfully influenced by their actual years of schooling and only minimally by their reactions to their educational qualifications. This is seen most dramatically in the multivariate results presented in Chapter IV. Their experiences in the market therefore seem to have impressed black men that employers were apt to treat their educational qualifications as market limitations and their expectancies about future employment reflect this. However, since black men's job performance expectancies, which tap just their views of themselves and not their assessments of employers' likely response to them, reflected their actual schooling far more than their reactions to their qualifications, black men do not appear to be overreacting to the issue of schooling. The impact of their beliefs about the role of education is highly differentiated and realistic. The better educated black men were more confident of their job-related abilities but not of their chances for employment. These results suggest that the problem lies in the market's (employers') responses to black men's education, not in black men's overreaction to their educational qualifications.

One other point should be highlighted about the effect of schooling on attributions for market difficulties. One might expect that better educated workers would report having met fewer market constraints -- fewer problems with discrimination, fewer difficulties finding jobs in the locales they wanted, fewer lay-offs, etc. However, schooling was not significantly related to the number of market constraints mentioned by any of the four groups of workers. In addition, years of schooling did not distinguish which black workers reported having experienced race discrimination. More highly educated black men and women were just as likely as those with less education to stress market constraints in responding to open-ended probes and in asnwering the direct question about whether race discrimination had ever held them back in finding jobs, in wages, or in promotions. Acquiring additional education has not served to protect workers from difficulties they attribute specifically to the way the market itself operates and it certainly does not minimize black workers' awareness of market difficulties that they attribute specifically to race discrimination.

Causal Attributions for Past Difficulties

Very little past research has attempted to measure people's causal attributions for their own market difficulties. For example, the vast literature on internal and external control attributions depends almost entirely on a measure that is at once both highly general rather than specifically focussed on market outcomes and also conservatively biased.[57] The recent laboratory work of psychologists following Wiener's[58] theory that emphasizes both the locus and stability of attributions has been restricted primarily to samples of college students and to just a few measures of attributions about academic-type achievements. What did we learn from our efforts to extend the measurement of external attributions from luck and task difficulty to systematic aspects of market discrimination? What did we learn about the relative importance of ability and motivation outside of the laboratory where these attributions mostly have been studied? The results showed clearly that adults in a natural setting simply do not attribute their market difficulties to either their ability or their motivational deficiencies. When they look to their own personal deficiencies, they talk about their educational limitations, not their lack of motivation or intelligence. Previous experimental research has implied that the pattern of attributing failure to motivational deficiencies and success to ability, a pattern that male subjects show more often than female subjects in experimental studies, is particularly facilitative of achievement. Our results indicate that this pattern could not be very critical in market achievement since workers do not use either ability or motivation as frequent explanations for what happens to them in the market. College subjects may restrict their explanations for success and failure on laboratory tasks or even to school achievement primarily to ability or to motivation but adult workers offer other explanations for their experiences and achievements in the market.

Previous attribution research seems limited by its predominant use of college samples in yet another way as well. Previous results suggest that most subjects follow a "typical bias" of attributing their own outcomes primarily to situational or environmental influences and the outcomes, atleast the failure, of other people to personal causes. Our results suggest that this may not be a "typical" perceptual (or judgment) bias. Black men did not show it, for example, in explaining why their own group (blacks) and another group (women) earn less and in other ways achieve less in the market than white men. They attributed women's wage differentials to situational forces more than to personal deficiencies of women; they, in fact, blamed discrimination for women's market differentials just as often as women did. Typical bias would have suggested that black men would look to environmental causes for the market differentials of blacks and whites but not so frequently for the market status of women. White women, by contrast, did show the typical bias in their attributions about women and blacks.

Black workers, both men and women, were generally far more aware than whites of the systemic causes of market differentials. They more often attributed race and sex differentials in wages and occupational status to market discrimination. Whites, by contrast, more often offered individualistic theories which stressed personal deficiencies rather than market factors. White men and women both blamed black people for their market difficulties more than black workers did. White men particularly stood out in stressing individual explanations for sex differentials in the market. The relationships between their own market experiences and their ideologies or theories about the causes of market differentials also showed strong influences of race. The personal market experiences of white workers were almost entirely irrelevant to their beliefs about the causes of sex and race differentials in the market. The one exception is that the more educated white workers more often blamed systemic forces for race differences and even more clearly for sex differences. Otherwise, neither the efforts white workers had made to alter their market positions nor their explanations for their own experiences seemed to influence their analyses of sex and race differentials in the market. Years of schooling was also the primary influence on black workers' explanations for sex differentials. However, their theories about the causes of race differentials very much reflected their own personal experiences and explanations of what had happened to them. Black men who had previously tried job changes and who felt they had been held back in life more often blamed race discrimination for wage differentials between blacks and whites. Both black men and black women who specifically felt they had been held back by race discrimination and who stressed market constraints in their own lives blamed race discrimination as the cause of the market problems of black people in general. Education was, by contrast, not related to black workers' beliefs about the causes of race inequities in the market. Personal experience with discrimination, itself independent of education, was enough and proved to be the critical correlate of black workers' causal attributions for the general position of blacks in the market.

These results suggest that much more attention needs to be given to the social experiences that influence people's attributions if we are to understand how causal attributions then affect behavior in natural settings and also serve to justify existing inequities in our society. Both groups of whites blamed the personal deficiencies of black workers for their market difficulties. Even those whites who stressed market constraints in their own lives were no more understanding of the inequities faced by blacks. White men more than all other groups blamed the personal deficiencies of women workers for their market difficulties. Even those white men who had experienced market constraints themselves stressed personal deficiencies of women. The only experience that clearly promoted awareness among whites of discrimination, especially in the market outcomes of women, was education itself. These results should help us understand why the need for affirmative action programs has not been widely understood or accepted since more white workers than black, particularly more white men, believe that we live in a meritocratic society where wage differentials are determined more by the personal deficiencies of the less well paid workers than by inequities in the market itself.

Psychological Expectancies

The results from the three causal analyses in Chapter V provide mixed support for the influence of expectancies on labor market position and behavior. Strongest support is demonstrated in the analyses of white housewives' future work intentions. Their expectancies of being able to find a job easily had a clear direct (net) effect on intentions, nearly as large as the direct effect of education and previous work experience. This contrasts markedly with the role of expectancies in explaining current job status or in explaining the search behavior of respondents interested in changing jobs. The expectancy most relevant to job status, sense of personal efficacy, had only a small, though still significant, direct (net) effect on current status. Expectancies even less impressively affected search behavior among white men and women who were interested in shifting jobs. The net effect of personal efficacy was not significant for women; the net effect of job performance expectancies was not significant for men.

A model in which expectancies are viewed as intervening states does not argue that expectancies should necessarily have sizeable direct (net) effects. But they should mediate the influence of earlier experiences and supply characteristics that workers bring to the market. Our causal analyses again provide only limited support for this mediating role of expectancies. Very little of the effects of education, race, and age on current job status operated through expectancies, although it is true that the small indirect effects of education were mostly mediated by the sense of personal efficacy. The model seemed so inappropriate to search behavior that we did not estimate the indirect effect of education through later experiences and expectancies. It was primarily the analysis of white housewives' future work intentions that supported an intervening role of current expectancies. Nearly a third of the total effect of education on housewives' employment intentions was mediated by later experiences and expectancies, and approximately half of these indirect effects involved the housewives' expectancies of being able to find a job easily if they tried.

Why were expectancies not stronger influences, particularly as mediators of earlier stage experiences and supply characteristics? Numerous possibilities may be offered. Education itself is a powerful determinant of many market outcomes, either because education denotes genuine evidence of work-related skills or because it is used as an illegitimate screen by employers. Because it typically has such large effects, it must also strongly influence variables that presumably operate as intervening or mediating conditions. And the mediating variables must then strongly influence the market behaviors of interest if meaningful indirect effects of education are to be demonstrated. We have used education just as an example to highlight the general issue: the product of two correlations (stage one relationship with stage two, and stage two with stage three) must represent a sizeable proportion of simple zero order correlation between stage one and stage three if a meaningful indirect effect of stage two is to be found. Psychological expectancies therefore must be heavily influenced by prior experiences and they must in turn heavily influence the market outcome to perform a meaningful mediating role. Of course, expectancies may function as mediators even with weaker relationships if the earlier experiences (or worker characteristics) also only weakly influence the market outcomes of interest. The sheer mathematics might suggest that the search for expectancy mediators is doomed. A committed demographer probably would suggest that social psychological explanations are inevitably of only minimal import because the strength of demographic variables in accounting for market outcomes then requires very powerful intervening social psychological variables. Unfortunately, much of the explanatory evidence offered by psychologists for social psychological variables results from simple or zero order effects. Very little evidence has been marshalled to show that expectancies, or any other motivational states, directly influence market outcomes or even operate as important mediators in the attainment process. Research by demographers, sociologists, and economists on the attainment process has likewise not advanced understanding of possible social psychological mediators because so few analyses have included measures of such possible mediators.

We viewed this resaerch as a beginning exploration of the role of expectancies. We are not yet ready to abandon the model or the significance of psychological expectancies. The decisions that human capitalists suggest that workers make absolutely require workers to consider future expectations and available alternatives. The evidence that we have presented in Chapter IV showing that market experiences did influence the expectancies we measured also supports our contention that discrimination can operate through discouraging the future expectancies of workers. Future research, however, will need to tackle some of the measurement and design limitations of the present study to extend this type of interdiscriplinary research on the labor market.

We measured only three psychological expectancies. All of them were highly general. Future research on workers' expectancies needs to ask very specific questions about specific market events. In doing so several distinctions also need to be drawn. Worker's own performance expectancies need to be distinguished from their assessments of employers' responses to their performance (system responsiveness). Both of these expectancies also should be distinguished from workers' judgments of the probable payoffs (instrumentalities) of certain behaviors. Take the issue of promotion. Measures need to be taken of workers' judgments of whether they perform well enough to merit promotion, the likelihood that they would be promoted providing they performed to standard, and the probable payoff that current promotion might have on future mobility or income or other desired end states. We feel that the performance-system responsiveness distinction particularly needs to be drawn to investigate the impact of discrimination or market constraints on the "discouraged worker syndrome."

A particularly serious limitation of the present research for understanding the "discouraged worker syndrome" derives from tying both the job performance and employment expectancy measures to the worker's current job. We learned that black men and both groups of women, felt their chances of getting another job as good as their present ones were lower than white men considered their chances. Both groups of women also felt less self-confident about their job performance abilities. These expectancy differences must substantially underestimate true differences since women and black men are judging their employment chances and performance for jobs that already pay less well than the jobs held by white men. We could have adjusted for this problem had we measured wage rate by covarying it when we examined race and sex differences in expectancies. However, we also feel that future research needs to cast some expectancy questions about hypothetical market outcomes that could have comparable meaning for all groups of workers.

Future research also needs to focus on young workers who are just hitting the market for the first time. Adjusting for age as we did in the job status analysis certainly minimized the problems that were provided by having such a wide range of marekt experiences. However, we suspect that the dynamic of experience and expectancy can be unraveled best if young workers (new market recruits) are followed in their first search experiences and into their first jobs and thereafter once or twice a year for the first six or seven years. Some national longitudinal studies that originally oversampled late adolescents (for example, the National Longitudinal Study of Labor Market Experiences, Project Talent, Monitoring the Future of Youth) could be useful for this type of research if the subsequent follow-up interviews were to probe sufficiently for a detailed job history, retrospective explanations for the history, prospective measures of future expectancies, conceptions of alternatives open to the respondents, and future behavioral intentions.

The Education-Experience-Expectancy Model

The measures that we used in estimating the education-experience-expectancy model did explain a meaningful proportion of the variance in all three outcomes. Thirty-one percent of the variance was explained in current job status, thirty-three percent in the search behavior of employed white women, twenty-four percent in the future work intentions of white housewives, and thirteen percent in the search behavior of employed white men. The model we delineated was useful, therefore, in this explanatory sense. We were disappointed, nonetheless, that the results did not show stronger evidence for the role of market experiences and current expectancies in mediating the impact of worker's race and sex status. We, in fact, did not test the mediation of possible sex discrimination since none of the dependent variables we investigated were particularly sensitive to sex differences.

We clearly needed many more measures of market behaviors and outcomes that are sensitive to race and sex effects. In addition, however, future research needs to collect additional measures of present discrimination and not rely so exclusively as we did on workers' retrospective accounts for their past market experiences. These measures of present discrimination should include both workers' perceptions of discrimination and independent measures on the local labor market (sex and race wage differentials, unemployment rates by sex and race, etc.) and on the firm in which the worker is employed. Serious concern with firm characteristics would require sampling firms and following the employment history and shifts in expectancies of new, young workers in firms that genuinely vary in job distribution by race and sex. Even a national sample of individuals can include more than we did about present discrimination and other characteristics of the present labor markets that workers face. We view these present discrimination and other market characteristics as influences at the same stages as expectancies, operating either as exogenous variables or as mediators of workers' race and sex status.

APPENDIX A

Difference Between Two Independent Z Coefficients (r)

Appendix Table A

Difference Between Two Independent Z Coefficients (r)

Variable	Black Men			Black Women		White Men
	Black Women	White Men	White Women	White Men	White Women	White Women
Years of Schooling Attained						
Tried a job change				3.30		2.96
Tried an educational change				2.83	2.82	
Held back by educational limitations				3.30	3.21	
High mention of family obligations	2.40		2.96	2.17		1.97
High mention of financial difficulty		1.96	2.88	2.83	3.85	2.15
System blame ideology re: sex inequities		2.37	2.40			
High job performance expectancy	3.31	2.78	4.09			3.23
High personal efficacy			2.16			
Tried a Market Change						
Held back by educational limitations				2.08		
System blame ideology re: sex inequities	2.14	2.54	2.08			
Tried a Job Change						
Tried an educational change			2.08	4.81	5.05	
Held back in life	2.60	3.60	4.25			
Held back by educational limitations	2.99	2.71	3.37			2.69
High mention of educational deficiencies	2.72	1.96	2.96			2.33
High mention of family obligations	3.70		2.32	3.96	2.57	2.51
High mention of financial difficulty			2.08			
System blame ideology re: race inequities	2.27	4.42	4.17			
System blame ideology re: sex inequities	2.66	3.85	3.85			
High employment expectancy	2.86			2.83	3.67	
High job performance expectancy			2.00			4.12
High personal efficacy	3.25	2.21	2.48	2.17		

Appendix Table A (continued)

Variable	Black Men			Black Women		White Men
	Black Women	White Men	White Women	White Men	White Women	White Women
Tried an Educational Change						
Held back in life		2.37	2.33	1.98	1.93	
Held back by educational limitations	2.14			1.98		
High mention of financial difficulty			2.40			2.51
System blame ideology re: race inequities	3.77			1.98	3.12	
System blame ideology re: sex inequities	2.92			3.11	3.58	
High job performance expectancy	2.01			2.83		2.69
Held Back in Life						
Held back by educational limitations					2.11	2.33
High mention of market constraints			2.89			2.69
High mention of educational deficiencies			2.16	2.17	3.30	2.33
High mention of family obligations			2.08			
System blame ideology re: race inequities		2.70	2.08			
System blame ideology re: sex inequities		2.62	2.00			
High employment expectancy	2.47	3.19	3.85			
High job performance expectancy						2.51
Held Back by Race, Nationality or Religion						
High mention of financial difficulty	2.01					
Held Back by Educational Limitations						
High mention of financial difficulty				2.36		2.87
High job performance expectancy		1.96				

Appendix Table A (continued)

Variable	Black Men			Black Women		White Men
	Black Women	White Men	White Women	White Men	White Women	White Women
High Mention of Market Constraints						
High mention of educational deficiencies				2.55	2.20	
High mention of family obligations				2.64	2.39	
High mention of financial difficulty			2.08			
System blame ideology re: race inequities		2.37		3.21	2.57	
High employment expectancy					2.02	
High Mention of Educational Deficiencies						
High mention of financial difficulty						3.94
System blame ideology re: sex inequities	3.12		3.61			
High employment expectancy		3.27	2.64			
High job performance expectancy		2.70				
High Mention of Family Obligations						
High mention of financial difficulty	3.77		4.65	5.38		10.21
System blame ideology re: race inequities						
System blame ideology re: sex inequities				2.26		4.12
High job performance expectancy				2.64	2.20	
High Mention of Financial Difficulty						
System blame ideology re: race inequities			2.16			3.58
System blame ideology re: sex inequities						2.69
High employment expectancy				2.08		2.15
High job performance expectancy		2.13	2.40			
High personal efficacy		2.37	3.13			

Appendix Table A (continued)

Variable	Black Men			Black Women		White Men
	Black Women	White Men	White Women	White Men	White Women	White Women
System Blame Ideology re: Race Inequities						
High employment expectancy					2.20	
High job performance expectancy					2.11	
System Blame Ideology re: Sex Inequities						
High job performance expectancy		3.52	2.00	2.55		3.23
High Employment Expectancy						
High job performance expectancy	2.14					

α .05 = 1.96

α .01 = 2.32

Footnotes

1. Mitchell, 1974.
2. Feather, 1961, 1963.
3. Gurin, P. and Epps, 1975, Burlew and Gurin, P., 1976.
4. Mitchell, 1974; Feather, 1966, 1968; Zajonc and Brickman, 1969.
5. McClelland, 1961.
6. Atkinson, 1964.
7. See Atkinson, J. and Raynor, 1974 for a recent presentation of the motive-expectancy interaction theory of motivation.
8. Gurin, G. and Gurin, P., 1970.
9. Ben-Porath, 1967.
10. Rosen, 1972.
11. Becker, 1964
12. See Kahne and Kohen, 1975 for a review of both these theoretical developments and empirical studies on sex discrimination.
13. Phelps, 1972.
14. Bergmann, 1974.
15. Bluestone, et al., 1973; Sawhill, 1973; F. Weisskoff (Blau), 1972.
16. Madden, 1973; Gordon and Morton, 1974.
17. See Rosen, 1972, for the development of these two forms of discrimination in his model of human capital.
18. Madden, 1973; Oaxaca, 1973; Kahne and Kohen, 1975.
19. Ashenfelter, 1968; Ashenfelter and Heckman, 1973.

Footnotes (continued)

20. Hamilton (1973) estimates that 8 to 18% of the male wage is the discrimination figure for four occupations she studied. Suter and Miller (1973) report that women teachers earn $2800 less than men, women sales persons $3800 less than men, and women operatives in nondurable good manufacturing industries $300 less than men. Levitin's (1971) research shows that the proportion of women earning $3500 or more below what they should have been earning given their productivity characteristics varied by occupational grouping from only 12% operatives up to 70% among the professions. Of course, these occupational classifications are gross. When women and men in exactly the same job in exactly the same industry site are compared, earnings differentials nearly disappear. Malkiel and Malkiel (1973) show, for example, in a case study of a single employer with 272 professional employees, that men and women in truly equal job levels with the same job characteristics do earn equal pay. The problem as they saw it was the men and women in Ph.D.'s working in a research organization generally were not assigned to the same job levels.

21. Oaxaca, 1973.

22. Duncan, O. D., 1968; Blinder, 1973, 1974; Welch, 1973, 1974, 1975; Haworth, Gwartney and Haworth, 1975: Marshall, 1974.

23. Corcoran, 1973; Gordon, 1971

24. Corcoran, 1976; Bergmann, 1974.

25. Gurin, P. and Epps, E., 1975.

26. Duncan, O.D., 1961

27. Morgan, J. N. et al., 1975.

28. Jones and Nisbett, 1971.

29. Miller, 1966.

30. Oaxaca, 1973; Freeman, 1973.

31. Duncan, O. D., 1968.

32. Hoffman, 1976.

33. G. J. Duncan's recent analysis (1976) of the 1970-71 wage rate of black and white men does not support previous findings, however, in that an additional year of education conferred a similar earnings advantage, approximately a 6% increase, for both groups.

Footnotes (continued)

34. Hoffman, 1976.

35. Treiman and Terrell, 1976; McClendon, 1976.

36. Corcoran, 1976.

37. Oaxaca, 1973.

38. Waite, 1976.

39. Waite and Stolzenberg, 1976.

40. Mincer, 1974.

41. Hoffman, 1976; Jencks, 1972.

42. Oaxaca, 1973.

43. Duncan, G. J., 1976.

44. Mitchell, 1974.

45. Andrisani and Abeles, 1976.

46. Andrisani and Nestel, 1976.

47. Duncan, G. J., 1976.

48. Gurin, G., 1970; Veroff, et al., 1972.

49. Gurin, G., 1970.

50. Veroff, et al., 1972.

51. Andrisani and Abeles, 1976.

52. Seeman, 1975.

53. Oaxaca, 1973.

54. Corcoran, 1976.

55. Oppenheimer, 1970.

Footnotes (continued)

56. This measure of market improvement efforts is admittedly not what human capital theory means by investments in one's human capital. They mean any investment that requires time and money, a current sacrifice for future pay off. They usually estimate such an investment by years (and continuity) of work experience since all workers are assumed to gain additional training and skill from working at a job. We did not have a measure of continuity of work experience, or even number of years workers had been in the labor force. We do not mean to imply that the employed women in this sample had been as continuously employed, or had worked as many years, as the men. Previous research is highly consistent in showing that women have not worked as long or as continuously as men and that their lower "work commitment" accounts for a considerable amount of sex differentials in wages. Previous research is not definitive, however, about the amount that work experience reduces wage differentials or why single women earn less than men, despite reasonably comparable work commitments. In any case, we feel that our results on efforts to improve market value does speak to the controversy about sex differences in human capital investment, perhaps even more directly than data pertaining to estimated work experience. Our measure is an explicit effort to ask about investment through additional schooling, training on the job, and job changes.

57. See Gurin, P., et al, 1976, for a discussion of the conservative individualistic theme that runs through the ideological items in the Internal-External Control scale.

58. Wiener, 1973.

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